

# DISTRO

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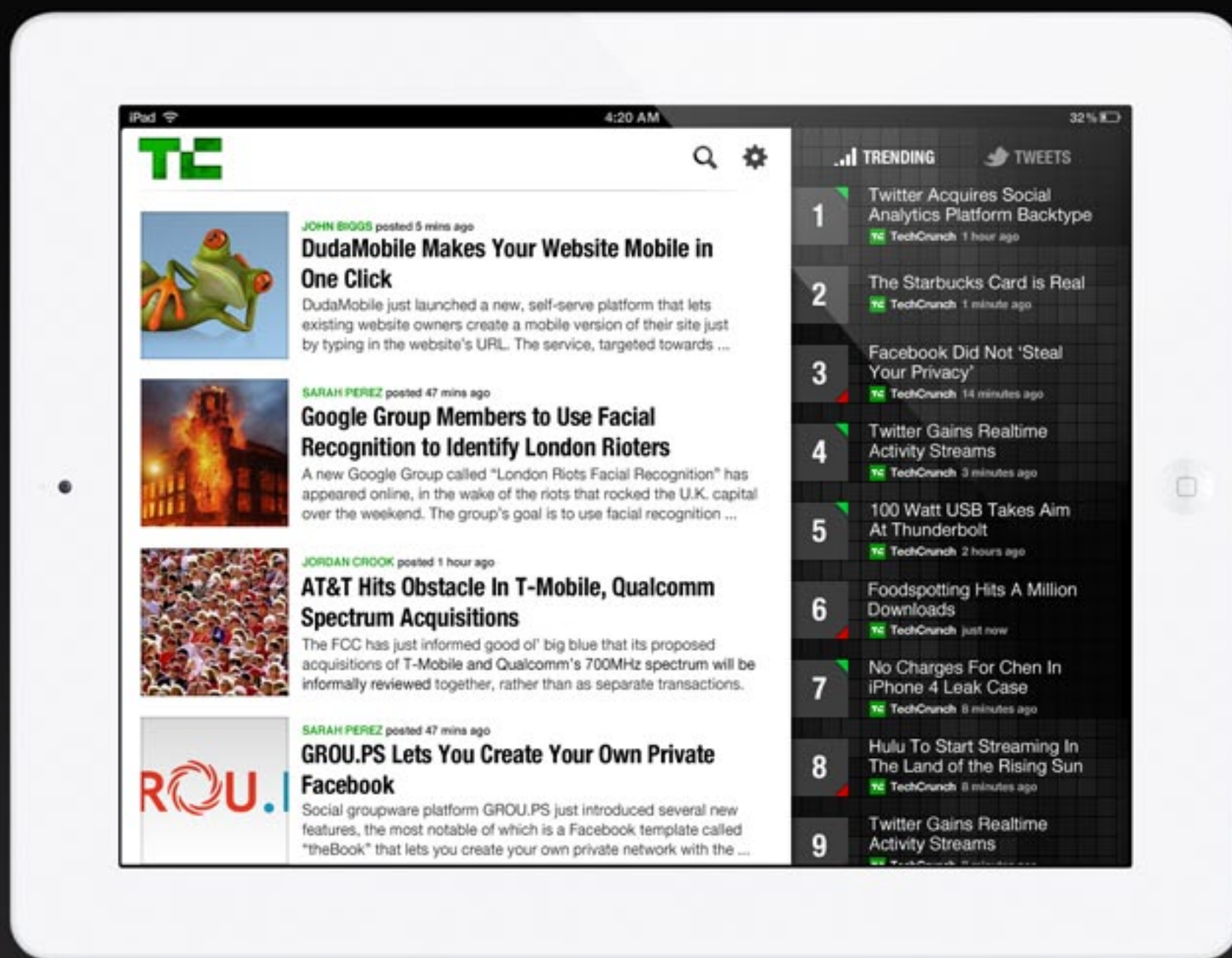


# BACK TO SCHOOL



# TechCrunch

The Inside Story On Innovation.



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# ISSUE 104

DISTRO

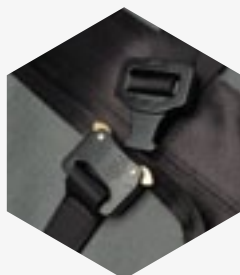
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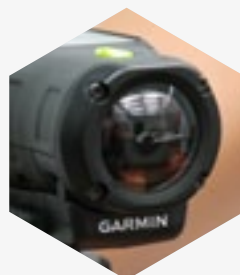
## ENTER



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## ESC



**VISUALIZED**  
**Green Machine**



**REHASHED**  
**Data Hoarders and Bling Ringers**



**TIME MACHINES**  
**A Unique Type**

*On the Cover:*  
Illustration for Distro  
by Jesse Lefkowitz



# BACK TO SCHOOL

DISTRO  
08.23.13

EDITOR'S  
LETTER

**There was a time** when gearing up to go back to school meant little more than picking up a new backpack, some clothes and the latest HP calculator. Those days, of course, are long gone, and even fifth-graders can expect to start the school year with a new smartphone and laptop.


In this issue of Distro, Engadget's annual back to school guide presents our **latest** recommendations for everything from tablets to TVs to gaming gear. And if you're a US resident over 18 (sorry fifth-graders), there's still time to enter our [Back to School sweepstakes](#), where we're giving away tons of great gadgets, including laptops, e-readers and smartphones.

While Americans may assume that Europeans take August off, they actually spend at least part of the month at Gamescom, Germany's massive gaming conference, which packs as many as 300,000 people into Cologne's Koelnmesse trade and exhibition center. This year's Gamescom has featured major announcements from Microsoft, Sony and developers large and small, as they gear up for the rollouts of the Xbox One and PlayStation 4. We now know exactly when the PS4 will be available, and how Microsoft plans to deal with the poten-

tial onslaught of indie games on the Xbox One (their answer: bring it on!).

The major console makers weren't the only companies making news at Gamescom. Among other things, we took a look at gaming on Google Glass, and sat down with Oculus Rift creator Palmer Luckey and Oculus VP Nate Mitchell to talk about the future of virtual reality gaming.

Virtual reality and wearable computers may be the future, but this week's Distro takes a step back to look at the Malling-Hansen Writing Ball, a keyboard design from the 1800s that was popular with, among others, German philosopher Friedrich Nietzsche. A poem written by Nietzsche on the writing ball could easily apply to today's smartphone-toting traveler: "The writing ball is a thing like me: made of iron yet easily twisted on journeys. Patience and tact are required in abundance as well as fine fingers to use us."

Nietzsche apparently liked the device's portability, but he had to stop using it after it broke down in transit and was damaged further by an inept repairman. Looks like the existential crisis that is tech support is something that has been with us for a long time. 

MARC PERTON  
EXECUTIVE EDITOR,  
ENGADGET





# ENTER

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08.23.13

EYES-ON

## DEFY REDACTED MESSENGER BAG

### THE COVERT SACK

It's no secret that we have a soft spot for well-designed bags — especially if they're handcrafted here in the USA. Defy's Redacted messenger is another in that lineage that can not only store a full gadget arsenal, but does so with ballistic-strength Cordura fabric, vinyl truck tarp lining, seatbelt straps and Austri Alpin Cobra quick-release buckles.

**THE DAMAGE: \$267+**

Tap for  
detail



**ORGANIZED  
SECRECY**

**QUICK  
RELEASE**



**BLACK  
LINES**



# ENTER

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EYES-ON

## DEFY REDACTED MESSENGER BAG



### ORGANIZED SECRECY

Interior compartments sort a wealth of gadgets and other daily needs from a 15-inch laptop down to pocket-sized sketchbooks.

PHOTOGRAPHS BY WILL LIPMAN





# ENTER

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EYES-ON

## DEFY REDACTED MESSENGER BAG



### QUICK RELEASE

A pair of Austri Alpin Cobra quick-release, load-bearing buckles maintains a secure closure while rounding out the overall Redacted look.

PHOTOGRAPHS BY WILL LIPMAN





# ENTER

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EYES-ON

## DEFY REDACTED MESSENGER BAG



### BLACK LINES

A seatbelt strap provides a sturdy carry while a luggage strap of the same material drapes the exterior. All to keep classified info under wraps, of course.

PHOTOGRAPHS BY WILL LIPMAN







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# OPPO R819

**PRICE: \$349**

**AVAILABILITY: SEPTEMBER 2013**

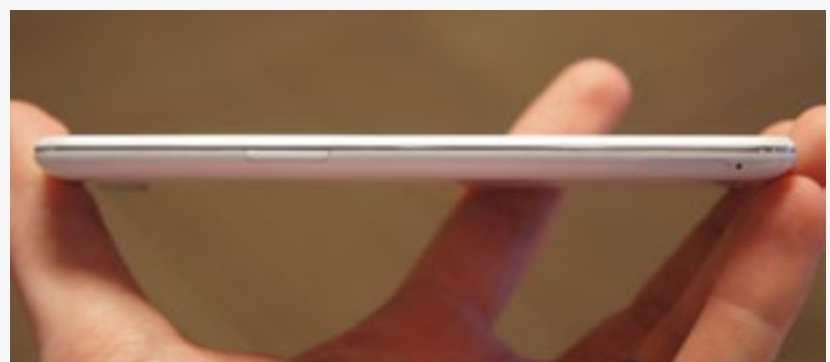
**THE BREAKDOWN: OPPO CATERS TO ANDROID ENTHUSIASTS WITH THE R819'S TINKERING NATURE AND SVELTE DESIGN.**

**Oppo smartphones** may have a good reach in China, but it's a name that most people in the Western Hemisphere haven't heard of. As with many other OEMs from the area, the manufacturer is hoping to reverse that trend, and its strategy is to first appeal to the most hardcore of enthusiasts with its latest device, the R819. The reason we

mentioned that Oppo plans to win the hearts of Android enthusiasts is because the company's mantra is to let you, the user, do whatever you want to the phone. While the R819 will come with an already existing version of its Color ROM out of the box, Oppo promises to have vanilla Android 4.2 available on its site, where all you need to do is download the ROM on your computer, sideload it onto the phone, install in the recovery and reboot.

Oppo's available smartphones are few in number, but each one that we've handled so far has left us with a positive impression in terms of the sleekness in design. The R819 continues that trend, as it's plenty thin at 7.3mm (0.29 inch) and one of the lightest phones on the market at 3.88 ounces (110g). When





you factor in the soft curves on each side, what you have is a killer combination that makes this 4.7-inch device feel incredibly comfortable. Its frame consists of a white polycarbonate shell and metallic rim around the edge; its lightweight nature makes it feel a little cheap at first, but we're confident that this chassis can handle its fair share of wear and tear.

It comes in a dual-micro-SIM setup only, and boasts a 1.2GHz quad-core Cortex-A7 MediaTek MT6589, which uses a 28nm process. The SoC features a PowerVR SGX544 GPU and you'll get 1GB RAM to help things along. Rounding out the specs, the R819 offers a 4.7-inch (720p) IPS display, a 2,000mAh non-removable battery, Dirac HD sound tech enhancement (which is

also found in the Find 5), Bluetooth 3.0, 802.11b/g/n, aGPS and 16GB internal storage with no microSD support. Unfortunately, the R819 doesn't offer LTE in any frequency.

Finally, you'll have an 8-megapixel rear camera and 2-megapixel front-facing shooter at your disposal. Oppo boasts a dedicated ISP that should result in vivid color reproduction, along with anti-halo software that softens and removes the rings around lights in your late-night shots. It'll also feature a five-layer lens coating, like we've seen on the Find 5, and a claimed 0.6-second shutter lag. All told, this is feeling like a pretty decent choice for a mid-range phone so far, though it appears the biggest sacrifice Android enthusiasts will need to make is in its lack of LTE.







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**PRICE: \$79**

**AVAILABILITY:**  
**NOW ON SALE**

**THE BREAKDOWN:**  
**THE TARTARUS**  
**BRINGS ANOTHER**  
**KEYPAD OPTION**  
**FOR ONE-**  
**HANDED, FULLY**  
**PROGRAMMABLE**  
**GAMING ADD-ONS.**

# RAZER TARTARUS

**Most PC gamers** are content to game on the standard QWERTY keyboard layout, but a select few prefer a special niche peripheral: the keypad. Razer's been building these single-hand keyboards since it helped Belkin create the n52te SpeedPad and it's still at it, recently announcing the Razer Tartarus. Featuring 25 programmable buttons (including 15 face keys and an eight-way directional thumb pad), the Tartarus is billed as a successor to Razer's Nostromo — although it actually has more in common with the \$130 Orbweaver.

Like the high-end keypad, the Tartarus has fully programmable keys

with unlimited-length macro support, Razer Synapse 2.0 for profile syncing and key-binding and the company's modern design language, but it eschews the Orbweaver's articulating ergonomics and mechanical keys to hit a lower \$79 price point. These efforts shaved nearly 50 percent off of the product's sticker price, but also cost it an additional row of keys. We spent a few minutes with the device and were pleased at how well it worked right out of the box, handily emulating the standard WASD gaming setup it's built around. We did miss the Orbweaver's additional buttons, however, as the smaller keypad's three-row setup left us reaching for a row of numerical analogs that simply weren't there. It's not the game controller for everyone, but it's good to know that there are options for niche peripheral fans on a budget.



# GARMIN VIRB & VIRB ELITE



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**There are more than enough** action cams on the market, but that's not stopping Garmin from jumping head-first into that saturated space. The GPS maker hopes to bring something fresh to the table with its \$299 VIRB and \$399 VIRB Elite, a pair of ruggedized camcorders that do more than simply snap footage from within a clear protective shell. Both models can shoot 1080p clips at 30 fps and 16-megapixel still photos (while recording video) for up to three consecutive hours with one 2,000mAh cell. But they also offer a variety of features that some competitors can't match, including a low-power, 1.4-inch transfective LCD for navigating menus and previewing footage; optional (digital) IS; and the ability to sync up with a variety of other Garmin devices through ANT+.

That last feature is perhaps the most compelling here — VIRB's ANT+ chip lets you add on accessories like a heart rate monitor while also pairing with the company's Fenix watch, logging GPS coordinates and other stats with each captured clip. The pricier Elite flavor brings positioning sensors on board, however,

**PRICE: \$299 & \$399**

**AVAILABILITY: SEPTEMBER 2013**

**THE BREAKDOWN: GARMIN'S ACTION CAMS WIELD AN ANT+ SENSOR FOR PAIRING WITH THE OUTFIT'S FENIX GPS WATCHES AND MORE.**

along with an altimeter and WiFi, which you can use to connect the cam to a dedicated Android or iOS app. That software component lets you see a live preview and control basic settings (video start / stop and still-image capture) remotely — eventually, you'll be able to send content from the device to your phone or tablet, though that functionality isn't included just yet. A tiny remote will also be available as an add-on, should you opt to leave your smartphone at home.

It's easy enough to operate the water-resistant camera without a remote though, even with it mounted on your helmet or attached to a surfboard. A sliding record button lets you power up and start shooting video right away, even when the camera's turned off. There's no built-in storage, but you can slide in your own microSD card under the battery.





# OSI: The Internet That Never Was

By Andrew L. Russell  
*IEEE Spectrum*

From the latest issue of *IEEE Spectrum*, an extensive look at a piece of internet history that many may not be familiar with. Known as the Open Systems Interconnection, or OSI, the initiative dates back some 35 years and was competing to be the networking standard that TCP/IP ultimately became. As Andrew L. Russell tells it, though, that's a fight that was in some ways doomed from the start, with OSI unable to catch up to the "less rigid" TCP/IP despite some significant backing. It's also a simply fascinating story, and Russell helpfully provides a list of further reading for those interested in digging deeper, including Janet Abbate's *Inventing the Internet*.



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stories

## The Untold Story of Google's Quest to Bring the Internet Everywhere—By Balloon By Steven Levy, *Wired*

Steven Levy takes an in-depth look at one of the latest projects to emerge out of Google's X lab: an effort to connect remote regions of the world to the internet using balloons. The company hopes that effort will soon include some 300 balloons circling the globe, but it unsurprisingly has much grander ambitions beyond that.

## Talking to Syd Mead: The Visionary Behind *Elysium*, *Blade Runner*, and 40 Years of Sci-Fi By Matt Patches, *Vulture*

Matt Patches talks to legendary designer Syd Mead about his recent work on *Elysium* and his storied career, including how he sketched out designs for *Star Trek: The Motion Picture* on a hotel bar napkin and imagined the worlds of *Tron* and *Blade Runner*.

## Meet The Dread Pirate Roberts, The Man Behind Booming Black Market Drug Website Silk Road By Andy Greenberg, *Forbes*

There's been plenty written about the more controversial aspects of Bitcoin, and its use in the drug trade in particular. This piece from *Forbes'* Andy Greenberg offers a fresh look at one oft-discussed site at the heart of the controversy, though, and the man behind it, who's granted his first extended interview.

## From the Omni Archive: *Dune* By Jeff Love, *Omni Reboot*

There've been a number of different visual interpretations of *Dune*, but according to Frank Herbert himself, none were truer to his vision than artist John Schoenherr. Here, Jeff Love offers a look back at Schoenherr's legacy — and, just as importantly, a look at some of the rarely seen art itself.





# Back to School



Accessories



Bags & Cases



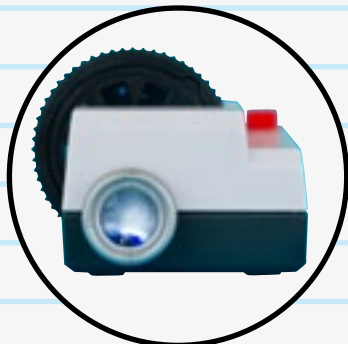
Digital Cameras



Docks



E-Readers



Fun Stuff



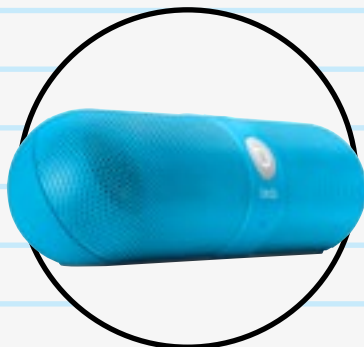
Gaming



HDTV



Laptops



Portable Audio



Printers



Smartphones



Tablets



Ultraportables

School's back in session, which means a return to the pencils, books and dirty looks of legend. But for many it also means a fresh injection of student loans and a chance to re-up that aging gadget collection. Sure, you'll spend the foreseeable future under a crushing pile of debt, but this is now, and you only get one chance to impress your dorm mate. So put down that Cup O' Noodles and jump into our guide to the best gadgets for any budget.





# ACCESSORIES

While you've been fretting over the more essential items for your return to school, we've been out on a bit of a field trip of our own. The mission? To dig out the most essential (and, we'll admit it, fun) accessories to see you through your next academic year. Of course, we have all the big hitters covered in other sections of our annual back to school guide, so we've hit the books — er, websites — to find those items that could help tip your work into the next grade. So, whether you're a biologist, a computer scientist, a music major or just love gadgets, we offer up our list of accessory essentials.

**By James Trew**





# Accessories

ON THE CHEAP



this nostalgic take on the capacitive stylus? Of course, you'll likely want to keep your tablet stable while you doodle on it, and the SeeSaw iPad case — also from Griffin — has this covered. Write, draw and research while listening to tunes? Perfect.

**KEY SPECS:** Built-in stylus holder, works in landscape and portrait modes, carrying handle, full access to tablet ports (SeeSaw), capacitive tip (Pencil Stylus).

## GRIFFIN NO. 2 PENCIL STYLUS AND SEESAW IPAD WORKSTATION

Whether you're retro or just too young to remember a time when pencils ruled the roost, what's not to love about

### YOU MIGHT ALSO LIKE...

#### RASPBERRY PI SET-UP KIT

If you're savvy enough to have picked up a Raspberry Pi already, you might be interested in this starter kit to go with it. It comes with a laundry list of cables and input devices along with a memory card (with a Linux distro onboard). You're good to go, whether you end up hacking the device, or just using it to write your dissertation.



#### NOKIA FATBOY WIRELESS CHARGING PILLOW

Keeping charged up all day is essential, but fiddling with cables can be a pain. This wireless charging pillow can stay put on your desk, freeing your charger up to use in another room, or to throw in your bag. Nokia's Fatboy pillow is fully Qi-compliant, and we like the five bright color options, not to mention the soft material finish.





# Accessories

MID-RANGE



## PATRIOT AERO 1TB WIRELESS MOBILE DRIVE

Hey, we know that half of the college experience is about the downtime, and Patriot's 1TB Aero wireless hard drive is perfect for storing all your movies, music and

photos while on the go. An app (iOS, Android and Kindle Fire) lets you use your mobile device to view your media, effectively giving you 1TB of storage you can use

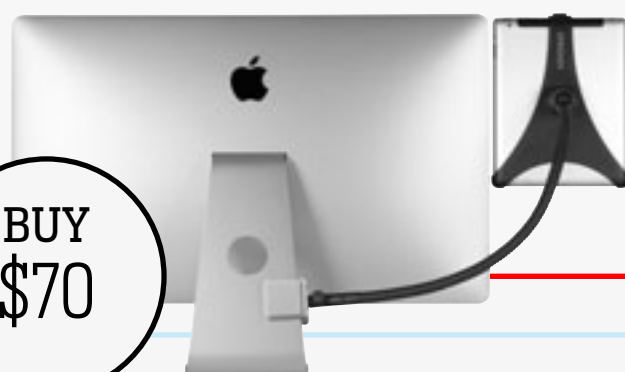
with multiple devices.

**KEY SPECS:** 1TB capacity; wireless streaming capability for up to five devices at a time; apps for iOS, Android and Kindle Fire; battery charge level indicator.

### YOU MIGHT ALSO LIKE...

#### TWELVE SOUTH HOVERBAR

Referring to those notes you scribbled down in class (see our "On the cheap" suggestions) is going to be a cinch with the HoverBar from Twelve South. Clip in your tablet, attach to your PC or desk and you've got yourself a comfortable second screen. Of course, once you're finished with your notes, you can clip it somewhere else to watch movies, surf and so on while your arms take a well-earned break.



#### KOUBACHI WI-FI PLANT SENSOR

The Koubachi Wi-Fi Plant Sensor could be your shortcut to an A grade in biology. The plant sensor keeps an eye on the soil moisture, temperature and light levels of your prized geranium (or whatever you're growing at college) and alerts you via an associated app when it might need attention. You also get the ability to care for multiple plants, plus indoor and outdoor options.



## BLUE MIC SPARK

Whether you're recording some notes, laying down your latest roommate-bothering guitar lick or speaking to family over Skype, Blue's Spark Digital is a great all-rounder. The desktop USB mic is iOS-friendly, has a headphone jack for monitoring plus an onboard volume control and an LED meter. The bundled cloud-production software should help get your recording career started, too.

**KEY SPECS:** iOS-compatible; USB connectivity; headphone jack; controls for volume, gain and instant mute.

BUY  
\$190

### YOU MIGHT ALSO LIKE...

#### SKY WIFI SMARTPEN 8GB PROPACK

When we reviewed the Livescribe, we were unabashedly fond of this quirky pen-cum-cloud-based note-taking gadget. For the tech-savvy student, it's the perfect marriage of technology and functionality. Recording audio snippets is cool, but having all your notes automatically uploaded to Evernote is the real clincher here.



BUY  
\$220







# BAGS & CASES

What's a stellar arsenal of tech if you've got nary a thing to store it in? Lucky for you, we're serving up a collection of bags and cases to protect and sort your gadget stash — and to keep that stylish look on the up and up as well. From a case that adds some extra juice to your iPhone 5's battery to a solid rucksack that adapts to a trip as easily as you must, this collection has something for everyone.

**By Billy Steele**



## MISSION WORKSHOP VX / R8 ARKIV FIELD PACK

Looking for a backpack that can adapt to any task? Well, Mission Workshop's modular offering will do just that, thanks to a variety of weatherproof add-ons that can store gadgets from smartphones to tools and everything in between. Of course, those extra compartments can be moved or removed whenever it suits your fancy.

**KEY SPECS:** 20- or 40-liter capacity, pocket for 15-inch laptop, PTFE waterproof membrane, VX70 ripstop liner.

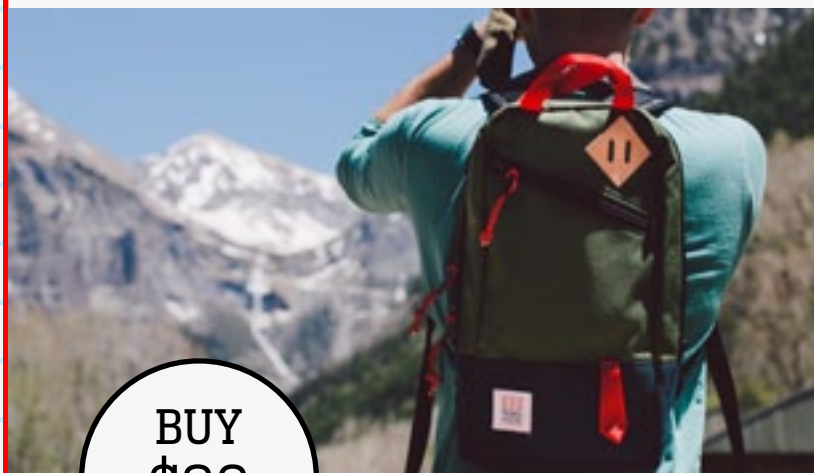
BUY  
\$320+



### YOU MIGHT ALSO LIKE...

#### TOPO DESIGNS TRIP PACK

When a smaller rucksack is needed, Topo Designs' Trip Pack can stash your slate of choice in addition to a few crucial cables and other odds and ends. This selection is made in the US, too.



BUY  
\$89

#### THULE PERSPEKTIV DAYPACK

If you're the sort who lugs around a DSLR on the regular, Thule's Perspektiv Daypack can wrangle it and all of the related extras. The pack also allows for quick and easy side access to that hardware, should a sudden photo op arise.



BUY  
\$160





# Bags & Cases

## MESSENGER BAGS & DUFFLES



### TIMBUK2 FREESTYLE PLUS

The folks at Timbuk2 know a thing or two about messenger bags, and the Freestyle Plus is a prime example of the company's expertise. A padded sleeve for protecting a tablet and 11-inch MacBook Air, plus a waterproof liner, should keep things nice and tidy while you're on the move.

**KEY SPECS:** Ballistic nylon exterior, waterproof TPU liner, padded laptop sleeve, internal organizer, adjustable cam buckle.



YOU MIGHT ALSO LIKE...

### DEFY REDACTED GREY

Premium rugged materials that include truck tarp lining, seatbelts and Austri Alpin Cobra buckles make the Defy Redacted bag both a bold statement bag and a reliable storage space for a 15-inch laptop.

### SKOOBA DESIGN LAPTOP WEEKENDER V.3

Worried about carrying a couple days' worth of clothing *and* all of the tech you'll need for a weekend away? Fret not; with more than 12 pockets and compartments, Skooba Design's duffle will organize it all — likely with room to spare.





## MOPHIE JUICE PACK HELIUM (IPHONE 5)

Day trips to the nearest national or state park can last well beyond the iPhone 5's battery life. That's where the Juice Pack Helium comes in: its 1,500mAh built-in battery will keep your social media exploits going strong for up to six additional hours — without adding a ton of extra bulk to that Apple-flavored smartphone.

**KEY SPECS:** 1,500mAh battery, 13 percent thinner than previous models, LED indicator, 1.6 ounces.

### YOU MIGHT ALSO LIKE...

#### OTTERBOX COMMUTER SERIES (HTC ONE)

Smartphone protectors from Otterbox have been known to make an appearance in our IRL feature from time to time, and now that there's a Google Play edition HTC One, the Commuter series comes to mind again. Adequate protection without a huge amount of extra heft? Yes, please.



#### SAMSUNG GALAXY NOTE 2 FLIP COVER

Samsung's Flip Cover for its smartphone behemoth provides an added bit of protection without mucking up the hardware's natural gloss too much. It's available in a rainbow of colors, too.







# DIGITAL CAMERAS

You don't *need* to pick up a dedicated shooter before you head off to college — your smartphone can likely fill in until you're able to drop some serious cash on a model that'll last all four years. Still, you'd certainly be better off with a device that can capture memories at concerts, football games, in the dorm and at parties without hesitation. For that, you're going to want a camera with serious capabilities, and many don't come cheap. We've sorted our favorites based on model type — there's something for everyone, and in every price range, too. A point-and-shoot will suit most students just fine, but photography and journalism majors will definitely want to step up to an interchangeable-lens camera, such as a compact mirrorless ILC or a full-size DSLR.

**By Zach Honig**



# Digital Cameras

## POINT AND SHOOT



## SONY CYBER-SHOT RX100M II

The Sony RX100 II is a modest update to our favorite point-and-shoot of all time, the RX100. This high-end camera definitely falls at the upper end of the pricing spectrum, but it's worth every penny thanks to top-notch optics and spectacular image quality. A large 1-inch BSI CMOS sensor lets you snap usable images at up to ISO 12,800, enabling low-light captures without a flash. The improved 3-inch, 1.3M-dot LCD tilts up and down, so you can see clearly even when holding the camera at odd angles. There's even a Multi Interface Shoe for adding accessories like an electronic viewfinder, microphone or external flash.

**KEY SPECS:** 20.2-megapixel 1-inch BSI CMOS sensor, 3.6x f/1.8-4.9 optical zoom, 1080/60p HD video.

### YOU MIGHT ALSO LIKE...

#### RICOH GR

The Ricoh GR's 16.2-megapixel APS-C CMOS sensor is gigantic for a pocketable camera, and an absent low-pass filter means super-sharp captures. The f/2.8 18.3mm (28mm equivalent) lens doesn't zoom, which many will find inconvenient, but the image quality you can achieve here makes the sacrifice worthwhile.



#### CANON POWERSHOT ELPH 130IS

If you're on a tight budget, you really can't go wrong with an ELPH. Canon's PowerShot 130IS sports a 16-megapixel sensor, an 8x lens, a sharp 3-inch LCD and boosted battery life. It also includes WiFi, enabling instant uploads to the web.





# Digital Cameras

## MIRRORLESS

### SAMSUNG NX300

Samsung's flagship NX300 is the company's most powerful camera yet. And, thanks to its autofocus capabilities, fantastic image quality and a competitive price, it's our top pick for 2013. The 20.3-megapixel APS-C sensor offers excellent output, and the retractable 20-50mm kit lens is versatile and compact. There are plenty of hardware controls, but you can also input settings directly on the high-res 3.31-inch AMOLED touchscreen, and you can share your shots right away using the built-in WiFi and companion smartphone app. It's also an excellent choice for shooting sports and other fast motion, thanks to a top shutter speed of 1/6000 second and an 8.6 fps continuous mode.

**KEY SPECS:** 20.3-megapixel CMOS sensor, 20-50mm f/3.5-5.6 lens, 1080/60p HD video.

BUY  
\$650



#### YOU MIGHT ALSO LIKE...

##### SONY NEX-3N

Sony's NEX-3N is our top pick under \$500. With a 16.1-megapixel APS-C sensor, 1080/30p HD video, 4 fps continuous shooting mode, 16-50mm retractable kit lens and a built-in flash, it's less powerful than the Samsung above, but the 3N is still a fantastic camera.

BUY  
\$400



##### OLYMPUS PEN E-P5

The E-P5 is Olympus' best mirrorless camera yet, with incredibly fast autofocus, a 1/8000-second top shutter speed, 9 fps continuous-shooting mode, 16.1-megapixel Micro Four Thirds sensor, WiFi and a unique five-axis image stabilization that lets you snap sharp shots and smooth video.

BUY  
\$999



# Digital Cameras

## DIGITAL SLR

### CANON EOS 70D

Canon's 70D is light-years ahead of its predecessor, particularly when it comes to video. If you plan to use a DSLR to capture motion pictures, there's no other model that can touch the 70D's autofocus capabilities.

A completely redesigned autofocus system enables brilliantly smooth focus transitions and incredible speed whenever you're using live-view mode. As for stills, the camera can snap 20.2-megapixel images



BUY  
\$1,349

with its APS-C CMOS sensor at up to ISO 25,600.

The 3-inch high-res touch-screen pops out and tilts up and down for improved control at a variety of angles. It also includes a

7 fps continuous mode, 1080/30p video capture and a microphone input with manual levels control.

**KEY SPECS:** 20.2-megapixel CMOS sensor, 18-55mm f/3.5-5.6 IS lens, 1080/30p HD video.

#### YOU MIGHT ALSO LIKE...

#### NIKON D7100

Nikon's D7100 doesn't sport Canon's advanced AF, but it's still a great choice for photographers who already have a collection of compatible lenses. It boasts a 24.1-megapixel DX-format CMOS sensor, 6 fps shooting, 1080/30p video and a bundled 18-105mm f/3.5-5.6 lens.



BUY  
\$1,500



BUY  
\$693

#### CANON EOS REBEL SL1

The Rebel SL1 is the smallest full-size DSLR in the world, and it really is compact. There's an 18-megapixel CMOS sensor, a top ISO of 25,600, nine-point AF system, 4 fps continuous shooting and 1080/30p video. It also ships with an 18-55mm f/3.5-5.6 IS STM lens.







# DOCKS

Plug and play... and then party in your dorm. That's how the kids do it nowadays, with their iPods, iPhones and Android devices connected to virtual libraries of stored and streaming music. But unless you're rocking an HTC One with BoomSound, the dinky speakers on your daily driver just aren't going to adequately pump out the late-summer jams. For those at-home boogie breakdowns, you're going to need some serious hardware. And lucky you, we're here to sort through the clutter and highlight the best back to school picks for any budget.

**By Joseph Volpe**



# Docks

ON THE CHEAP



## IHOME DUAL CHARGING STEREO FM CLOCK RADIO

This compact dock tells the time, wakes you up, plays your tunes and even charges that iPhone 5 via Lightning connector. Android fans need not worry, however; iHome's cubic dock also offers up a USB port for plug-and-play access.

**KEY SPECS:** iPhone- / iPod-compatible Lightning connector, USB port, FM radio, weighs 1.2 pounds.

### YOU MIGHT ALSO LIKE...

#### PHILIPS DS1155

This sleek Philips dock is made to showcase your iOS device, but its circular form has a specific function: it outputs omnidirectional sound.



#### SONY DOCK CLOCK RADIO

Leave it to Sony to inject a unique tubular style into its only does-everything AM/FM bedside dock-clock-radio for Android and iOS.





# Docks

MID-RANGE



BUY  
\$200

## JBL ONBEAT VENUE

Lightning doesn't have to be frightening if you get the right dock. This particular OnBeat Venue shucks the 30-pin

connector from last year's model in favor of future iDevices and Bluetooth streaming, while still outputting bombastic

sound at 30 watts.

**KEY SPECS:** Bluetooth streaming, Lightning connector, 3.5mm aux jack, weighs 7.4 pounds.

### YOU MIGHT ALSO LIKE...

#### SOUNDFREAQ SFQ-02RBR SOUND STEP

A shock of fire-engine red can class up any joint. It's even better when that audio design statement packs a rechargeable Li-ion battery, a 2.1-speaker configuration with a dedicated subwoofer and enough charging power for USB devices and your iPad.



BUY  
\$150



#### ILUV AUD 5

Nothing says the future like slim design, touch controls, wireless Bluetooth streaming and a dock fit for Lightning. For the price, iLuv's looker might have you looking for your wallet.

BUY  
\$110



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BACK TO SCHOOL GUIDE

# Docks

MONEY'S NO OBJECT

## BOWERS & WILKINS ZEPPELIN Z2

Forget dressing to impress; the Bowers & Wilkins Zeppelin Z2 is swank enough to brighten up the many shades of beige in your dorm room. With Ethernet, AirPlay streaming, a 3.5mm aux jack and a Lightning dock, this Z2's a surefire substitute wingman.

**KEY SPECS:** Remote control, WiFi, Ethernet, 3.5mm aux jack, Lightning connector, weighs 9 pounds.



### YOU MIGHT ALSO LIKE...

#### SAMSUNG DA-E750

Audio doesn't get any prettier than this. Samsung's mahogany stunner keeps up appearances by stowing away a Dual Dock compatible with Android and iOS devices. There's Bluetooth 3.0 to let you sidestep a physical connection for wireless playback.



#### JBL ONBEAT RUMBLE

Consider this the OnBeat Venue's bigger brother. JBL's more grown-up dock combines a subwoofer, Bluetooth streaming, Lightning connector and 50 watts of power into a Daft Punk visor-like design.







# E-READERS

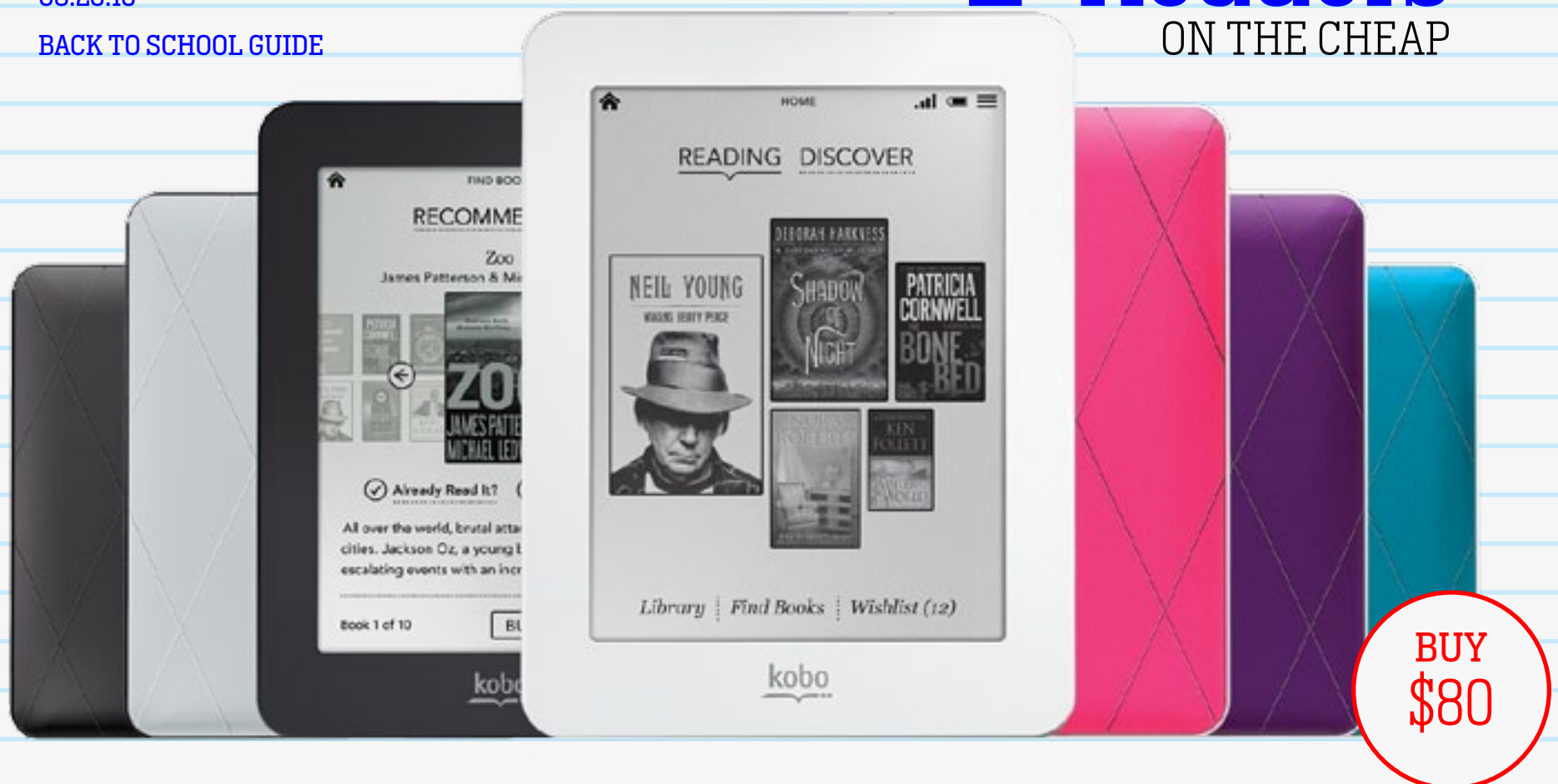
Schoolbooks? What is this, the late 20th century? Granted, we still have a ways to go before all the world's textbooks go digital, but e-readers should be able to stand in for most of those paperbacks, at least. So lose a little backpack weight, save a couple of trees and take notes without ruining your copy. We've got your e-reader needs covered, no matter what your back to school budget.

**By Brian Heater**



# E-Readers

## ON THE CHEAP



## KOBO MINI

Kobo gets some serious credit for going out on a bit of a limb in the past year. For those not looking to spend an arm and a leg (and let's face it; it's easier to read with two hands), the Canadian-

turned-Japanese company has shaken up the standard 6-inch form factor — ever so slightly — with this 5-incher. The Mini is lightweight, affordable and easy to use, and it's small enough to slip into a pock-

et. Still, the size does have a few trade-offs, including a predictable loss of reading real estate on that smaller display.

**KEY SPECS:** 5-inch Pearl E Ink display, 2GB built-in storage, 800MHz processor.

### YOU MIGHT ALSO LIKE...

#### AMAZON KINDLE

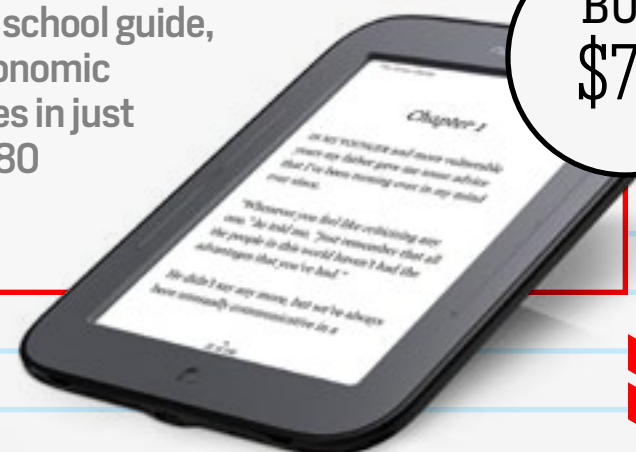
Amazon's dropped the price of its non-touch Kindle to an extremely appealing \$69. There are a few key sacrifices here too, of course. First, that price includes Special Offers. Second, this guy doesn't have a touchscreen or keyboard, so when you're searching for something in the store, typing is a bit of a pain. Still, this is far and away the cheapest way to get yourself a new Kindle.



BUY  
\$69

#### BARNES & NOBLE NOOK SIMPLE TOUCH

Good e-readers don't die; they just get deeply discounted. When the similarly specced Simple Touch with GlowLight became the centerpiece of Barnes & Noble's e-reader lineup last year, the bookseller cut this model's already low price down to \$99. A year since our last back to school guide, and the ergonomic reader comes in just under the \$80 price point.



BUY  
\$79





DISTRO

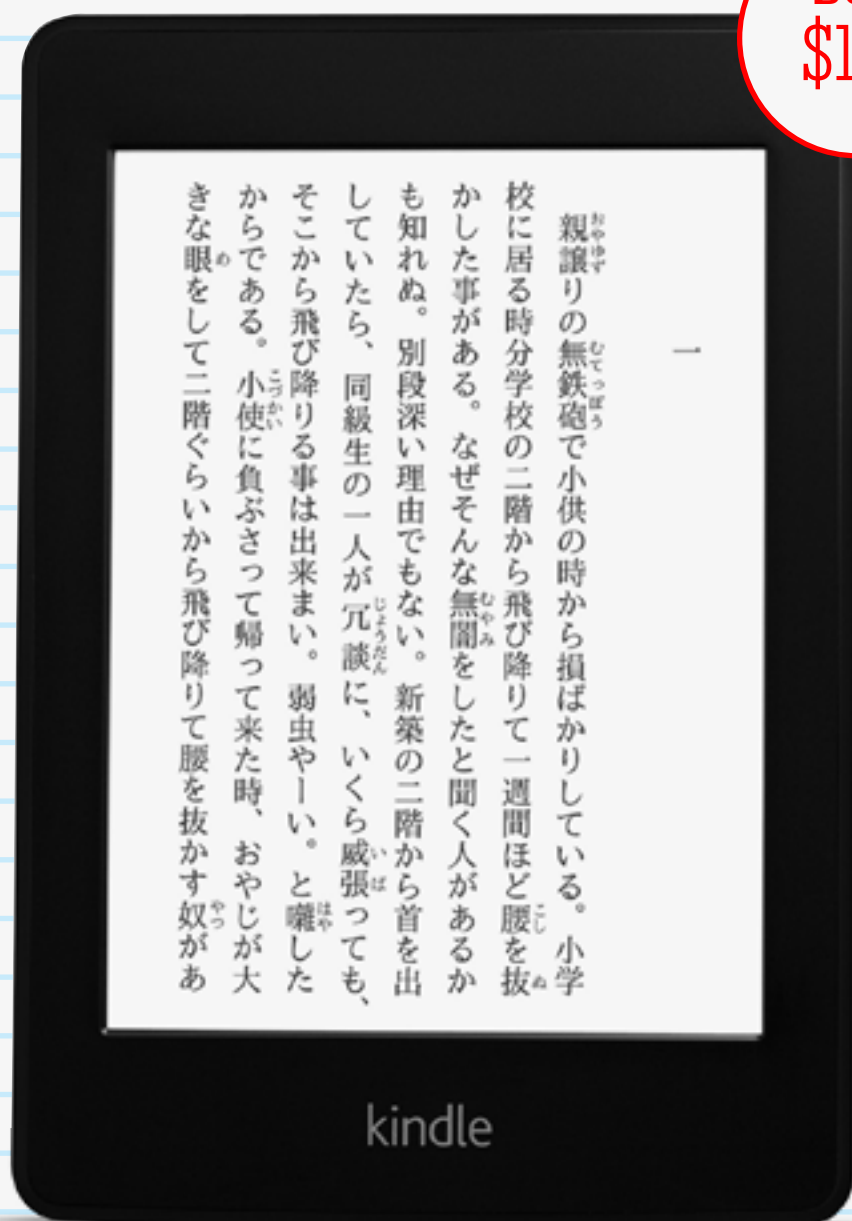
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BACK TO SCHOOL GUIDE

# E-Readers

MID-RANGE

BUY  
\$119



## AMAZON KINDLE PAPERWHITE

Amazon, Kobo and Barnes & Noble all have solid offerings in the e-reader space — in many cases utilizing the same or extremely similar components. So, how do you pick a winner? For starters, there's Amazon's expansive e-book selection — and let's face it, whether or not you own a Kindle, you've no doubt already got an Amazon account. There's also some great software on board, such as the Time to Read and X-Ray features. Finally, the Paperwhite's front lighting also improves on the Nook display's bluish cast by leaps and bounds.

**KEY SPECS:** 6-inch Paperwhite built-in light display, 2GB built-in storage, 800MHz processor.

### YOU MIGHT ALSO LIKE...



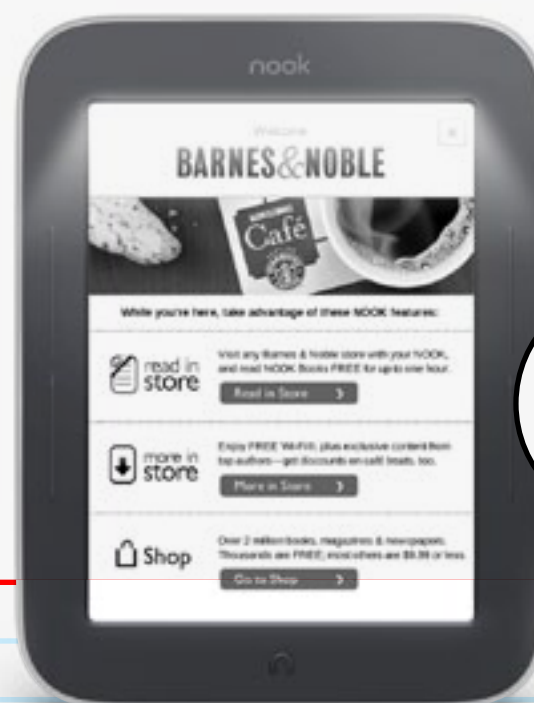
BUY  
\$130

### KOBO GLO

Kobo blew us away with the front lighting on the Glo, besting both Barnes & Noble's and Amazon's offerings (though the Paperwhite still comes out on top overall). The reader's design isn't particularly inspired, but if you find yourself already locked into the Kobo ecosystem, the Glo's a great option.

### NOOK SIMPLE TOUCH WITH GLOWLIGHT

The first of the big three to hit the market with a front-lit option, the GlowLight was novel, but quickly eclipsed by Amazon and Kobo in terms of quality. Still, this is a solid option, particularly given the Nook's contoured design, which sits nicely in your hand for long reads.



BUY  
\$99



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BACK TO SCHOOL GUIDE



BUY  
\$149

## BARNES & NOBLE NOOK HD+

There was a lot to like about the Nook HD+ when it dropped at the end of last year. At the top of the heap was that lovely 1,920 x 1,280 display, complementing the tablet's snappy processor and tailor-made reading experience. There was just one major caveat: a limited app selection. Thankfully, things changed back in May, when the company opened the tablet up to Google Play, making this a terrific offering for its price.

**KEY SPECS:** 9-inch [1,920 x 1,280] display, 16 / 32GB storage, 1.5GHz dual-core processor.

# E-Readers

## THE TABLET READER

### YOU MIGHT ALSO LIKE...

#### AMAZON KINDLE FIRE HD

The centerpiece of the Fire HD is an 8.9-inch, 1,920 x 1,200 IPS LCD [there's also a 7-inch version, mind]. There's no Google Play access, but Amazon has plenty of entertainment options to keep you busy, and interested parties can soup things up with some optional LTE.



BUY  
\$269

#### KOBO ARC

Google Play access? The Arc's had that since the beginning. Priced from \$129, the tablet also has frugality on its side. Compared to Kobo's prior offering, the Vox, this e-reader is a huge improvement. Hardware-wise, though, Barnes & Noble and Amazon both beat the Arc.



BUY  
\$129





# FUN STUFF



If we may paraphrase a tried-and-true saying, all work and no play makes one a very dull boy or girl. While laptops, tablets and smartphones are all essential pieces of study-time equipment, it's important to remember to cut loose and have a little fun every once in a while.

**By Melissa Grey**



DISTRO  
08.23.13  
BACK TO SCHOOL GUIDE



BUY  
\$100



## WITHINGS PULSE

Withings' newest little gadget is a must-have for fitness buffs. The petite Pulse tracks your physical activity 24 hours a day, while also recording heart rate, calories burned, elevation climbed and distance traveled. Additionally, the sleep-pattern analysis includes duration, interruptions, quality and the difference between deep and light sleep. The minimal, soft-touch design includes a sleek black wristband and a protective silicone case that you can clip on to your workout wear.

**KEY SPECS:** OLED touch screen, 128 x 32 pixel resolution, heart rate sensor.

# Fun Stuff

ON THE CHEAP

### YOU MIGHT ALSO LIKE...

#### NUMARK ORBIT WIRELESS MIDI DJ

Numark's wireless hand-held MIDI controller looks like exactly the kind of thing we would have begged our parents for as kids. This brilliantly colored toy comes with all sorts of features to play with, including 16 backlit pads and a customizable accelerometer for assigning volume, effect or filter settings that you control with your movements.



BUY  
\$100

#### PROJECTEO INSTAGRAM PROJECTOR

It's roughly the size of a large strawberry, and it only holds about nine photos, but this projector makes up for its limited use in sheer novelty value. Simply sign up with your Instagram account on Projecteo's website and select your images. The company will convert them into 35mm slide film and send them your way.



BUY  
\$35







## ROMO THE SMARTPHONE ROBOT

Look at that face. How can you not love that face? While he's no

Johnny 5, Romo does come with his own set of treads, allowing you to chase your siblings (or roommates) around the house without having to break a sweat. Two-way telepresence, navigational learning skills and facial-recognition software have never been cuter. Romo's dock works with iOS devices, including the iPhone 4, first-gen iPad, fourth-gen iPod touch and everything onwards from there.

**KEY SPECS:** iOS-capable, USB charging, Wifi control, facial-recognition software.

### YOU MIGHT ALSO LIKE...

#### R/C WI-SPI HELICOPTER

Snooping on your dorm mates just got more fun with this WiFi-enabled spy chopper. Don't just peer surreptitiously through the blinds — do aerial fly-bys with Interactive Toys' R/C Wi-Spi Helicopter. You'll have to be economical with your time as you only get seven minutes of flight time on a single charge, but the onboard camera lets you shoot and upload both still images and video.



#### STAR THEATER PRO HOME PLANETARIUM

This nifty home planetarium lets you star-gaze to your heart's content without having to break out the bug repellant.

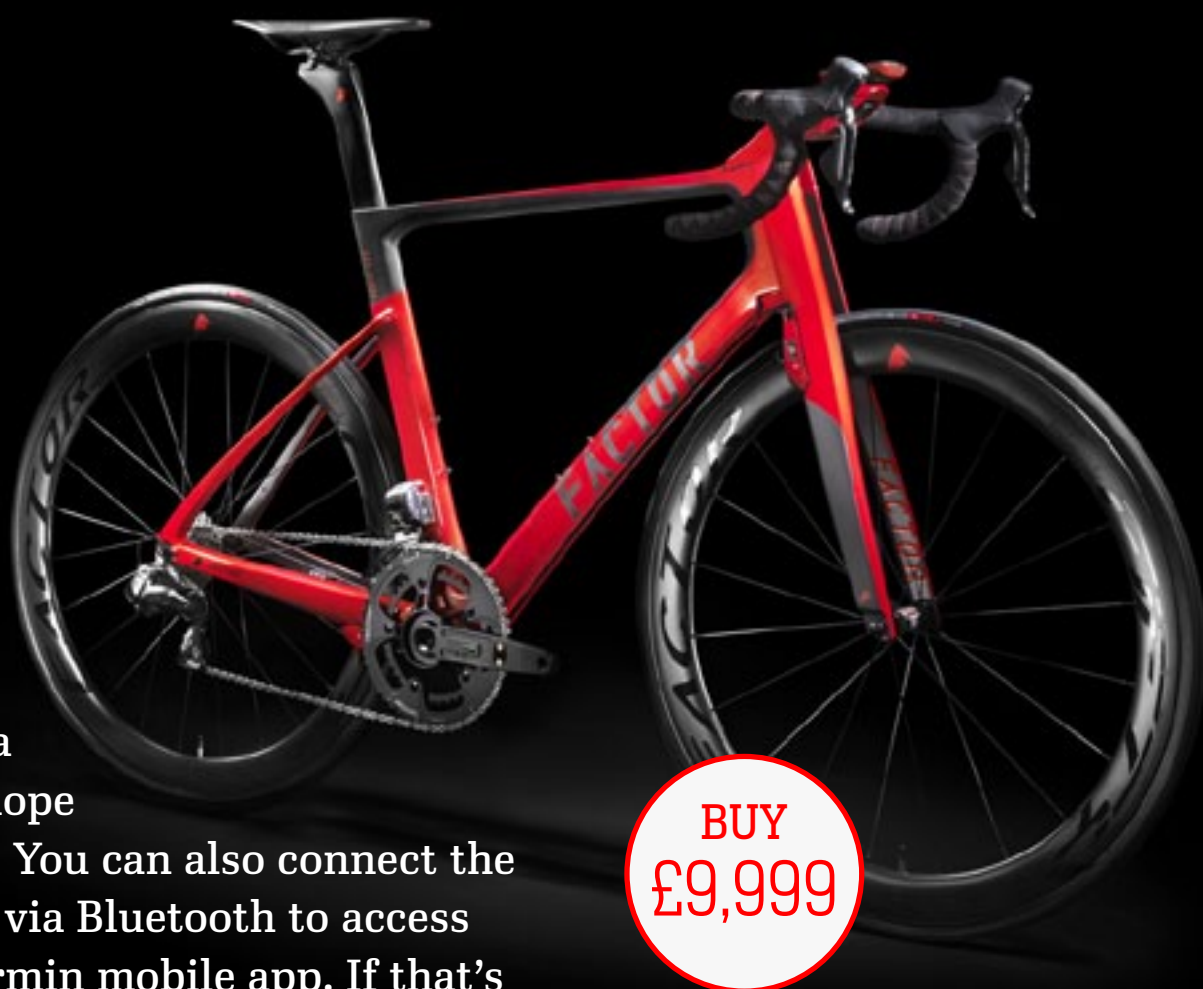
With a press of a button, you can convert a darkened room into your private planetarium, after choosing between two image discs: star field or Earth / moon / sun views.



## FACTOR BIKES VIS VIRES DURA ACE

The new Vis Vires Dura Ace is one of the sexiest high-end road bikes we've seen lately, and it doesn't hurt that it packs plenty of tech, either. Factor Bikes' lightweight model comes with a Garmin Edge 810, which provides data such as speed, distance and slope info, along with GPS tracking. You can also connect the Edge 810 to your smartphone via Bluetooth to access additional features on the Garmin mobile app. If that's not enough to make you start saving your pennies, then the power cranks, integrated wheel-speed sensor and 45mm clincher aero wheels should do the trick.

**KEY SPECS:** Shimano Dura Ace Di2, Factor Power Cranks, Garmin Edge 810 computer with HRM strap.

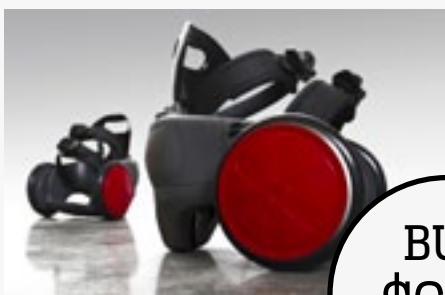


BUY  
£9,999

### YOU MIGHT ALSO LIKE...

#### SPNKIX PRO

Remember being the cool kid in school when you scored your first pair of rollerblades? Relive those halcyon days with a pair of spnKiX Pros. Priced at \$700 a pop, these electric, motorized skates are basically Segways for your feet. While that might not be enough to ensure that you'll become the cool kid on campus, at least you'll be able to flit to and fro with both speed and efficiency (so long as you don't try to break spnKiX's 10MPH speed limit).



BUY  
\$699

#### KILLER WHALE SUBMARINE

For the *Free Willy* fan who has everything, may we suggest this modestly priced (for billionaires, that is) killer whale submarine? Hammacher Schlemmer has outdone itself with this \$100,000 watercraft. Frankly, we can't imagine a better way to ride the waves than in this aquatic two-seater, equipped with a 255-hp supercharged Rotax axial flow engine that lets you hop out of the sea like a real dolphin. It's perfect for romantic dates, especially if you're trying to woo a marine biologist.



BUY  
\$100K







# GAMING

You probably shouldn't be playing video games in school, y'all. A certain back to school guide writer had his Game Boy and copy of *Pokémon* confiscated by a certain English professor in high school and, needless to say, it was a rough year. Thankfully, today your tablets and smartphones are often part of the educational experience — all we had was *Oregon Trail* and *Karateka*. Oh man, *Karateka*! But back to the goods: head below for our back to school gaming suggestions — if you convince your parents to pick this stuff up ahead of the first bell, perhaps seek out a career in law?

By Ben Gilbert



OUYA

The OUYA may not be the most thrilling of gaming devices, but it does have a massive game library (some of which is totally free to play). And hey, you can't really beat the

\$100 asking price. That said, you may wanna sell the terrible gamepad that comes packed in and snag a wired Xbox 360 control-

ler for a better experience.  
**KEY SPECS:** 1.7 GHz quad-core ARM Cortex-A9 CPU, ULP GeForce GPU, 8GB flash storage, Android Jelly Bean 4.2.



YOU MIGHT ALSO LIKE...

PLAYSTATION PLUS

PlayStation Plus has grown tremendously since its initial inception as a competitor to Microsoft's Xbox Live Gold subscription. It's become the most consumer-friendly deal in modern gaming: pay a subscription to Sony's service, get a handful of free games on both

your PlayStation Vita and your PlayStation 3 every single month. And it sounds like things are getting even better on PlayStation 4.

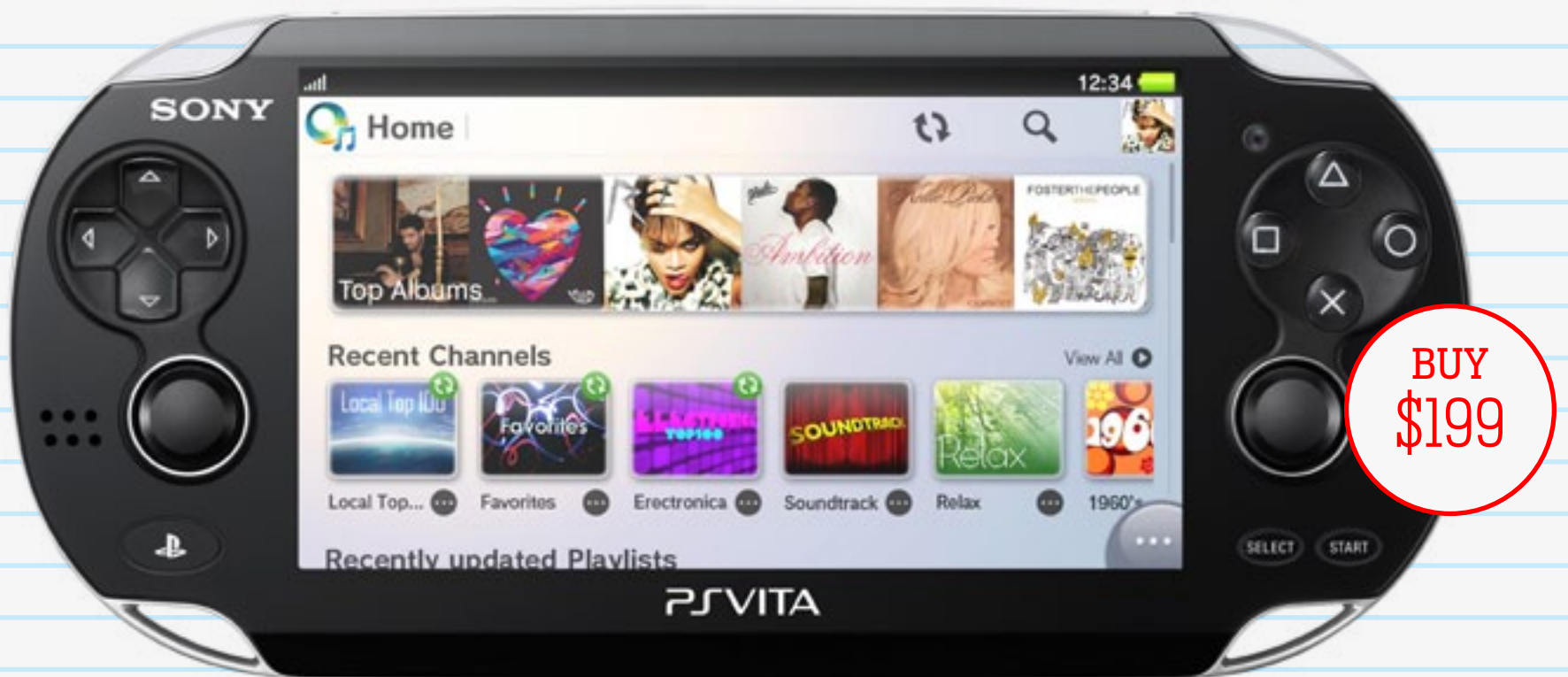


KILL SCREEN / EDGE

Nothing quite says "Back to School" like a subscription to an excellent, educational, well-written publication. We'd be fools not to mention the likes of *Kill Screen* and *Edge Magazine* in this regard; each is excellent for its own reasons, though both feature consistently intelligent reporting and critiques on the world of video games.







## PLAYSTATION VITA

The Vita continues to be an excellent gaming handheld. It's loaded with great games, still feels modern and acts as a far

better movie-viewing device than most phones. The recent \$50 price cut makes things easier to swallow and the Vita is

hard not to suggest for every other reason.

**KEY SPECS:** Quad-core ARM Cortex-A9 CPU, 5-inch (multi-touch) OLED screen.

### YOU MIGHT ALSO LIKE...

#### NVIDIA SHIELD

NVIDIA's Shield is quite a little handheld... if you've got the beefy PC and robust WiFi to facilitate its coolest feature: PC game streaming. It's also great for catching up on various digital media, and excellent as a weird-looking boombox. If you're thinking of an Android tablet, consider this a great alternative.



#### IPAD MINI

Despite having just suggested an Android gaming device, the iPad mini comes with the better games. It's also an easier argument for students, given that the iPad has become synonymous with education. Little do they know it can also be used for, like, hundreds of hours of *Super Stickman Golf*.



## TIKI PC, FALCON NORTHWEST

Falcon Northwest's Tiki PC is delightful. Yep, we're calling a black computer box "delightful." It's fast, smooth, quiet and powerful. The design of the box itself is enough to pique anyone's interest, taking the hyper-minimalist route and keeping the (overabundance of) ports out back.

Even in the modern world's ever-moving push to faster processors and more complex GPUs, the Tiki PC will assuredly last most students through the four years of high school or college on the horizon. (Oh, and — surprise! — it's a great gaming PC.)

**KEY SPECS:** Intel Core i5 / i7 chipsets, NVIDIA GeForce 600 / 700 / Quadro series GPUs, up to 16GB 1866MHz DDR3 RAM.



BUY  
\$1,796+

### YOU MIGHT ALSO LIKE...

#### RAZER BLADE

Razer's gaming laptop may be the finest gaming laptop on the market. It's slim, relatively light (for a gaming laptop, at least) and a tough, powerful little computer. Is it a hard sell to any parent, even of the Warbucks variety? You bet. But maybe you had an especially lucrative lawn-mowing stint this summer? Perfect!



BUY  
\$1,800+

#### XBOX ONE AND PLAYSTATION 4

It's highly likely that both Microsoft's Xbox One and Sony's PlayStation 4 will be hard to find come launch time this holiday.

As such, you should probably get in early and plunk down your name — plus some ducats — to reserve one for yourself. How else are you gonna get that A in Chemistry? With books? Pssst.



BUY  
\$499

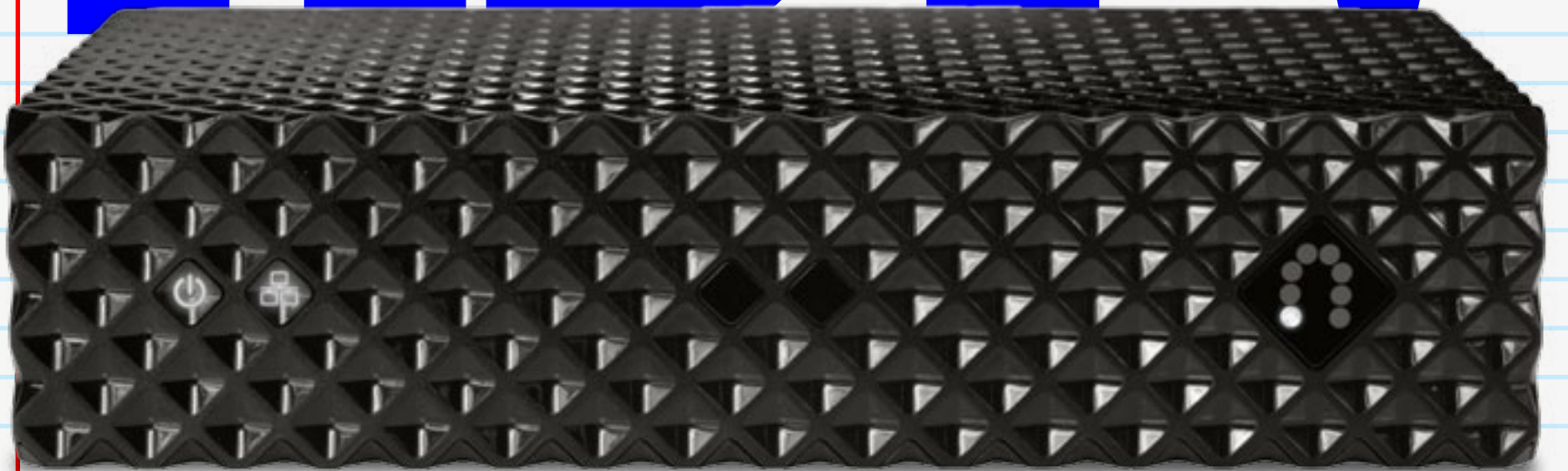


BUY  
\$399





# HDTV



This year's incoming class of freshmen is facing more than just lecture halls and 8 AM classes — there's a brand-new generation of consoles to deal with, not to mention the question of going 4K. Luckily we're here to help, with suggestions for set-top boxes, Blu-ray players, remotes and more to make the dorm feel just like home, no matter what your budget is.

**By Richard Lawler**





BUY  
\$99

## ROKU 3

If you're heading off to school without a current- (or next-) generation gaming console in tow, this year's media streamer of choice is the Roku 3. With updated software and hardware to go along with its healthy suite of channels, the newest Roku is a welcome addition to the line. Of course, the Apple TV is also an option if your media intake is tied to iTunes and AirPlay for easy mirroring, and an HDMI-connected PC is the most flexible choice, but in terms of simplicity, the Roku 3 is hard to beat. Finally, roommates everywhere will appreciate the new unit's remote; it features a headphone jack so you can watch Netflix on the big screen without waking anybody up.

**KEY SPECS:** 750-plus channels, dual-band 802.11b/g/n, 1080p.

### YOU MIGHT ALSO LIKE...



BUY  
\$115

### SONY BDP-S5100

Of course, if you'd like to enjoy discs along with your streaming content, you'll probably need a Blu-ray player — and this option from Sony is one of our favorites. It has apps for nearly every service users will expect (Netflix, Amazon, YouTube and many more), and the 2013 model promises a better WiFi connection to make sure video feeds don't drop out.

### SLINGBOX 350

If you're going to school out of state, you may have more issues than just higher tuition, since following your local team can get complicated. One of the easiest ways to address that is with a Slingbox, and the new 350 is updated with support for 1080p and an integrated IR blaster (adding WiFi means a step up to the 500). Connect this to a set-top box at home, and then watch local broadcasts from anywhere.

BUY  
\$148





## SAMSUNG UN32F5500 LCD

Need a small TV to go with your cramped accommodations? Samsung's UN32F5500 recently saw its price sneak under \$400, and with 1080p resolution plus built-in apps, WiFi and three HDMI inputs, it's more than ready to take on

the equipment you'll be plugging into it this year or next. Vizio, Toshiba and others have options in the sub-\$300 price range, although dropping down there will mean cutting features accordingly.

**KEY SPECS:** 1080p, 60Hz, Smart TV apps, dual-core CPU.



BUY  
\$390

### YOU MIGHT ALSO LIKE...

#### HARMONY ULTIMATE HUB

If what you need is a new way to control your home theater, take a look at Logitech's latest attempt, the Harmony Ultimate Hub. For just a Benjamin, it lets any iOS or Android device replace the remote you've either already lost or will misplace soon. In our dream world, it would use more than just IR or Bluetooth for control, but for now, just being the greatest addition to the Harmony family will have to do until it arrives on its own later this month.



BUY  
\$99

#### SONY STR-DN1040

For 2013, Sony updated the 7.2-channel receiver we already liked with a revamped chassis, 4K support and a new UI. We figure 10 HD inputs, WiFi, Bluetooth and AirPlay connectivity should be enough to last you at least through grad school.



BUY  
\$599



## PANASONIC TC-P55ST60

Panasonic is still pushing its well-regarded line of plasma HDTVs, and this year's ST60 is a great bang-for-your-buck option. Unfortunately, the GT we recommended last year is gone, and so are its THX-Certified configuration options (jumping up to the VT or ZT models adds all of that and more, albeit at a hefty price), but this one is slightly cheaper and brings a new "NeoPlasma Black" panel. Our advice? Find a relative that skipped your open house and explain how you need this to study the visual artistry of *Pacific Rim* in 2D and 3D for film class this fall — but beware the dreaded gaming lag.

**KEY SPECS:** 1080p, Infinite Black Pro Panel, two pairs active 3D glasses included, Viera Remote 2 app support.



BUY  
\$1,350

### YOU MIGHT ALSO LIKE...

#### LG 55GA7900

We're still not sure if Google TV will ever live up to Larry Page's boasts, but with built-in support for apps like OnLive, LG's latest round of TVs brings all the entertainment you could ask for, no set-top box required. Other new features

include NFC and Miracast, while a pumped-up dual-core processor inside keeps things moving smoothly and the Q3 Jelly Bean update should push the platform even further.



BUY  
\$1,499

#### SAMSUNG UN55F7500

This LED-lit LCD from Samsung brings most of the company's latest technology, including micro dimming, an upgradeable quad-core CPU and the Smart Interaction voice + gesture controls. Support for DLNA via AllShare means tossing media from different devices is easier than ever, and there's even a full web browser built right in.



BUY  
\$1,900







# LAPTOPS

If you were expecting us to recommend a MacBook Air or a Samsung ATIV Book 9, we'll kindly refer you to our back to school Ultrabook buying guide. But while an ultraportable will suffice for web surfing, Netflixing and the occasional all-nighter, some students will still crave a little more. A little extra storage space, perhaps, or a discrete GPU to pull off smoother gaming. Or maybe y'all just want something cheaper than your standard Ultrabook. No shame in that either. Whatever it is, we've got a handful of choices for each budget.

**By Dana Wollman**



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BACK TO SCHOOL GUIDE

# Laptops

ON THE CHEAP



## SONY VAIO FIT 15E

Sony made a bold move earlier this year when it decreed that all its new laptops would come standard with a few top-notch features: 1080p displays, NFC, backlit keyboards and webcams making use of Sony's Exmor-R imaging technology for better low-light shots. That's a lot to ask of an entry-level laptop and yet, that's what you get with the 15-inch VAIO Fit 15E, which starts at \$580 with a Core i3 processor. One flaw you should be aware of: the Fit series doesn't offer stellar battery life, largely thanks to those last-generation Ivy Bridge processors. So barring a refresh, at least, you'll want to plan on bringing the power adapter in your backpack.

**KEY SPECS:** 15.5-inch (1,920 x 1,080) display, up to a dual-core, 2GHz Intel Core i7-3537U CPU, up to a 2GB NVIDIA GeForce GT 740M GPU, up to 8GB of RAM, up to a 1TB (5,400RPM) hard drive with an 8GB SSD.

### YOU MIGHT ALSO LIKE...

#### ACER ASPIRE E E1-572-6870

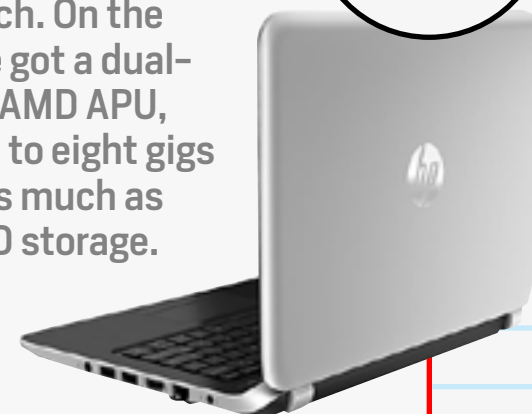
Even with Intel now shipping its Haswell CPUs, you'll be hard-pressed to find *that* many budget laptops with fourth-generation Core processors inside. The Aspire E1, though, comes with a spanking-new Core i5 chip, and for the reasonable price of \$500.

Other than that Core i5 CPU, specs are pretty much what you'd expect at this price (read: a 1,366 x 768 screen), though the spacious keyboard layout seems promising.



#### HP PAVILION TOUCHSMART 11Z

Okay, it's sort of a netbook, but when's the last time you saw a laptop this small — and this inexpensive — come standard with a touchscreen? For those who need something cheap and simple, the 11z is one of the few options available with touch. On the inside, you've got a dual- or quad-core AMD APU, along with up to eight gigs of RAM and as much as 500GB in HDD storage.





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BACK TO SCHOOL

# Laptops

MID-RANGE

BUY  
\$950

## TOSHIBA SATELLITE P50

Toshiba did the smart thing in launching its back to school laptops so that they shipped with Haswell processors out of the gate. The 15-inch P50 is the smaller of its two premium-series laptops, with all the looks of a high-end machine (slim, metal chassis) along with beefy

enough internals to satisfy most power users. At the base price of \$700 you get a Core i5 CPU, 8GB of RAM and 750GB of storage space, though the top-shelf model moves to a quad-core Core i7 CPU, 12 gigs of memory, 1TB of storage and a 2GB GPU. Possibly your best option, though, is to

look into the P55t-A5202 (\$908), a Best Buy exclusive that steps up to a 1080p display.

**KEY SPECS:** 15.6-inch (1,920 x 1,200) display, up to a quad-core, 2.4GHz Core i7-4700MQ CPU, Intel Integrated Graphics, up to 16GB of RAM, up to a 1TB (5,400RPM) hard drive with an 8GB hybrid hard drive.

### YOU MIGHT ALSO LIKE...

#### SONY VAIO FIT 14 PREMIUM

Yep, Sony's making a second appearance in this guide. All told, the Fit Premium models aren't all that different from the Fit E line, except that they're slimmer and built with higher-end materials. You also get a little more leeway in terms of specs, with hybrid hard drives standard (as opposed to regular HDDs). In our review, we deemed the Fit Premium a good value, and we enjoyed the improved keyboard as well.

BUY  
\$800

#### DELL INSPIRON 15R TOUCH

Though Dell's mainstream, 15-inch laptop starts at \$350 with a Celeron processor, we'd suggest you spring for the 15R Touch, which goes for \$800 and offers some generous specs like 1TB of storage and 8GB of RAM. Dell's also worked to slim down its Inspiron laptops since the last generation, as well as lighten the load, so at 5.12 pounds, it hopefully won't be burdensome to carry from the dorm to the library.

BUY  
\$800



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BACK TO SCHOOL GUIDE

# Laptops

MONEY'S NO OBJECT



## LENOVO IDEAPAD Y510P

BUY  
\$999

The 15-inch Y510p is powerful enough to suit gamers, but discreet enough that it could pass for a run-of-the-mill multimedia machine. (Okay, its red backlit keyboard might be something of a giveaway.) Even with the lower end of the range, you get some top-tier specs, like a 1080p screen, quad-core Core i7 Haswell processor, 1TB of storage and a 2GB NVIDIA GeForce GT 750M GPU. Move up the totem pole, though, and you can get twice the RAM, along with a 24GB SSD to pair with that hard drive.

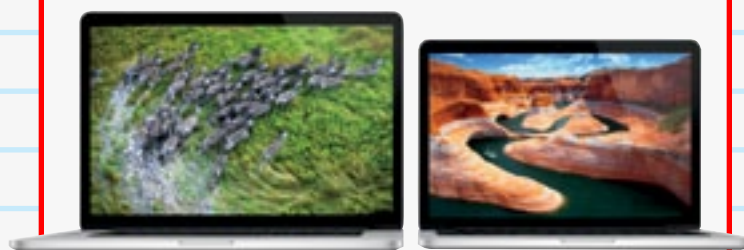
**KEY SPECS:** 15.6-inch (1,366 x 768 or 1,920 x 1,080) display, up to a 2.4GHz quad-core Intel Core i7-4700MQ CPU, up to a 2GB NVIDIA GeForce GT 750M GPU with optional Ultrabay SLI graphics, up to 16GB of RAM, 1TB of internal storage with an optional 24GB SSD.

### YOU MIGHT ALSO LIKE...

#### MACBOOK PRO WITH RETINA DISPLAY

If money really is no object, it doesn't make much sense for us to recommend the regular ol' MacBook Pro over the Retina display version, even though the \$300 starting price gap will probably appeal to students (or their parents, at least). Obviously, the star of the show is that super-sharp display, though we're contractually obligated to tell you not all content is actually optimized for it. The only hitch: these MacBook Pros haven't been upgraded with Haswell – yet.

BUY  
\$1,499



#### SAMSUNG ATIV BOOK 8

You might know it as the Series 7 Chronos, but it's been rechristened as the ATIV Book 8. Available with a 15-inch screen only in the US, it packs a quad-core processor, a 1GB AMD Radeon HD 8770M GPU, 8GB of RAM, 1TB of storage and a 1080p, 300-nit display. Only problem: it was announced so long ago that it currently ships with Ivy Bridge.

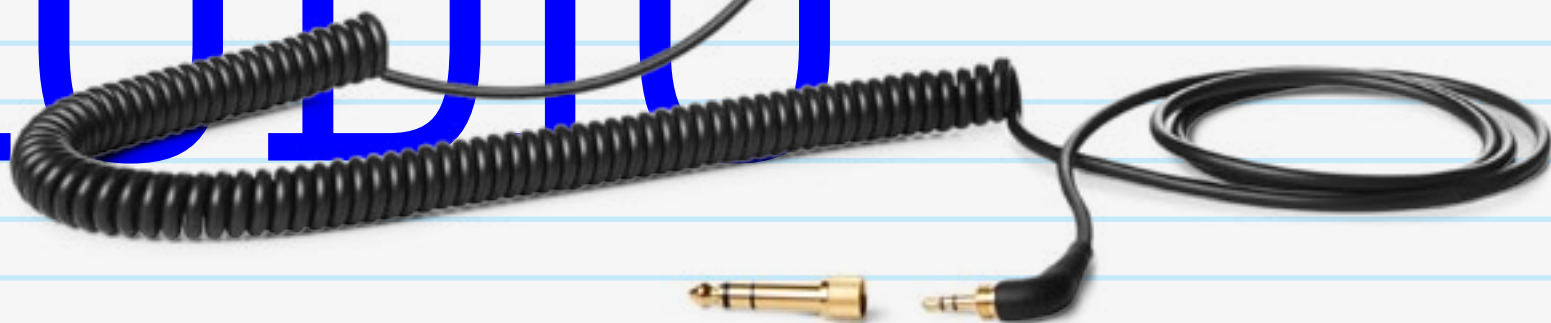
BUY  
\$1,200







# PORTABLE AUDIO



College isn't cheap — especially with loan rates on the rise — but arming yourself with beats to take all over campus doesn't have to cost a fortune. If you're set on having great audio along for your cross-classroom travels, we'd like to help. As such, we've compiled a list containing nine of our favorite portable audio products that blend fun, portability, good looks and great sound across a variety of price points. Audiophile or not, don't sacrifice your sound too much this semester!

**By Joe Pollicino**



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BACK TO SCHOOL GUIDE

# Portable Audio

ON THE CHEAP



## LOGITECH UE MOBILE BOOMBOX

Gone are the days when a \$200 Jawbone Jambox was your best option for a tiny Bluetooth speaker with decent sound. Logitech's UE Mobile Boombox isn't the prettiest

unit out there, but it offers impressive sound quality for just under 100 bones. A rubberized enclosure ensures it'll handle minor bumps in a bag, and you'll get 10

hours of listening per charge.

**KEY SPECS:** 10-hour battery, two drivers with passive bass radiator, microphone, rubberized design, 3.5mm input jack, Bluetooth 2.1.

### YOU MIGHT ALSO LIKE...

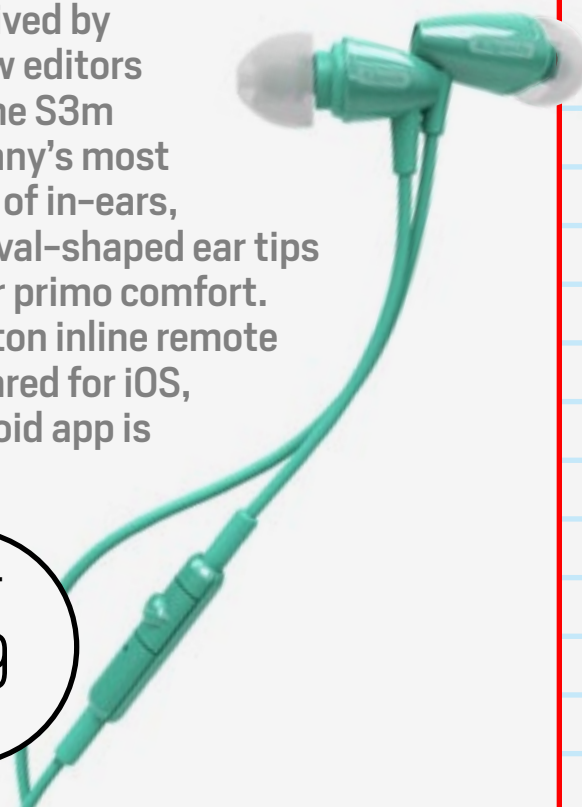
#### SKULLCANDY CRUSHER

There's no way around it: vibrating headphones will always be a tad gimmicky. Forgive us, then, for thoroughly enjoying Skullcandy's Crusher over-ears. Two editors on staff have noted how accurate the bass sensation seems to feel — not to mention the decent sonic quality for the price.



#### KLIPSCH S3M IN-EARS

Klipsch's audio offerings have been well-received by more than a few editors at Engadget. The S3m isn't the company's most glamorous pair of in-ears, but the usual oval-shaped ear tips are included for primo comfort. The single-button inline remote and mic are geared for iOS, but a free Android app is available, too.





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BACK TO SCHOOL GUIDE

# Portable Audio

MID-RANGE



## BEATS BY DR. DRE PILL

BUY  
\$200

We recommended it in last year's holiday guide, and the Pill still lives up to its price point. The small form factor is easy to tote around, and the Pill's four drivers put out massive amounts of clean volume compared to

similarly sized speakers. If that wasn't enough, there are Apt-X and AAC codecs to ensure that pleasing audio quality is always on deck. NFC's built-in for quick pairing and, naturally, you can use the device as a speak-

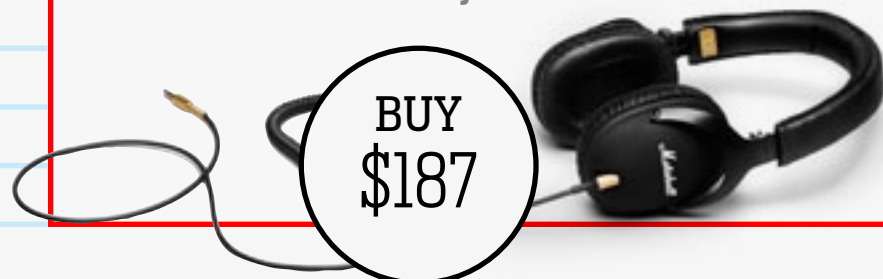
erphone. You'll get seven hours of listening before the Li-ion battery needs a fuel-up.

**KEY SPECS:** Four 1-inch drivers, 3.5mm input and output jacks, NFC, microphone, Apt-X and AAC support, Bluetooth 2.1, micro-USB charging.

### YOU MIGHT ALSO LIKE...

#### MARSHALL MONITOR OVER-THE-EAR HEADPHONES

The Monitor moniker doesn't exactly translate to studio-quality sound, but Marshall Headphone's latest earphone option does pump out smooth audio. Add a comfortable over-ear fit and guitar amp-inspired look, and you have both style and substance. Felt treble filters are included to let you smooth out the high-end if you so desire, and you can share your music with a friend thanks to its dual cable jacks.



BUY  
\$187

#### WESTONE ADVENTURE SERIES ALPHA

Westone is well-known for its impressive and expensive IEMs, but its latest offering seems like a sure hit for the college crowd. Moderately priced at \$200, the Adventure Series Alpha features ear loops for a secure fit and IPX-3 beer water resistance. Its 6.5mm drivers pump out the jams, while an iOS remote and mic help you stay in control.



BUY  
\$200



# Portable Audio

MONEY'S NO OBJECT

## AIAIAI TMA-1 STUDIO ENGINEERED BY YOUNG GURU

The latest in AiAiAi's TMA-1 headphone range may be the best iteration yet. The familiar matte-black design is still at play, but now with an updated voicing and some red accenting to the cabling. Better yet, the cloth-covered memory foam pads provide the most comfortable fit we've experienced from AiAiAi's offerings. From rap to rock, these cans deliver articulate sound with healthy amounts of deep-reaching bass.

**KEY SPECS:** Locking cables, understated design, interchangeable earpads, carrying pouch, 180-gram weight, 40mm drivers, 320hms, 102 +/- 3dB SPL.



BUY  
\$269

### YOU MIGHT ALSO LIKE...



BUY  
\$400

### SENNHEISER IE 80

While the IE 80 in-ears don't seem too special at first glance, two key features make 'em worth more than just a look. An adjustable frequency control allows you to fine-tune the bass output, complementing the 26dB of passive noise cancellation. In other words, you can get the party bumping in your head, while also blocking out any noisy frat houses you come across.



BUY  
\$399

### LIBRATONE ZIPP

Calling a speaker the size of a two-liter bottle of Coke "portable" is a bit of a stretch. That said, the Libratone Zipp offers 96dB of room-filling sound you'll be able to tote across the dorm. PlayDirect lets you harness the lossless goodness of AirPlay without a router, while Libratone's Live app offers an array of EQ and DSP options.







# PRINTERS

While you'll spend most of your time staring at a screen as you hastily pull together assignments at the last minute, you'll still need something to put your work to paper when the time comes to turn it in. Luckily, we're on hand to show there's much more to the wonderful world of inkjet printers than just pumping out projects, whether that be producing high-quality photos straight from your camera's SD card, or making memories tangible by printing straight from Facebook — no computer required. There are scores of printers available at virtually every price point, so if you'd prefer not to spend your last days of freedom researching printers, read on ahead and delve into our back to school suggestions.

**By Jamie Rigg**



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08.23.13  
BACK TO SCH

# Printers

ON THE CHEAP



## HP DESKJET 3510 E-ALL-IN-ONE PRINTER

Want a printer with all the mod cons that doesn't suck too much out of your budget? HP's Deskjet 3510 does a lot for the asking price. In addition to being your scanner and copier, it lets you print via WiFi, ePrint (email-to-print) and also straight from your smartphone with the help of free apps (AirPrint supported). It'll produce photos at a maximum of 4,800 DPI, and sports a 2-inch monochrome LCD for selecting printer features — and for generally looking industrious.

**KEY SPECS:** 4,800 DPI max resolution, HP ePrint, WiFi, smartphone printing, 2-inch LCD screen.

### YOU MIGHT ALSO LIKE...

#### CANON PIXMA MG2220

Canon's PIXMA MG2220 has no wireless credentials, and it doesn't ship with the USB cable you'll need to get going. That said, it can scan, copy and print borderless photos up to 8.5 x 11 inches, as well as handle your standard docs and spreadsheets. With a max color DPI of 4,800, this all-in-one's pretty capable when you factor in its most attractive feature: a very wallet-friendly price.



BUY  
\$31

#### EPSON EXPRESSION HOME XP-200

This Epson "small-in-one" matches the Deskjet 3510 in wireless features, with WiFi, Epson Email Print and remote printing. You can also print from mobile devices using apps, AirPrint or Google Cloud Print. It'll spit out photos at a maximum 5,760 DPI, and takes four separate ink cartridges, so you only need to switch out the reserves that you've exhausted.



BUY  
\$39





# Printers

MID-RANGE

## BROTHER MFC-J875DW

Willing to break the Benjamin barrier? Brother's MFC-J875DW all-in-one supports wired Ethernet networking as well as WiFi, and will print from mobile devices (including via WiFi Direct), USB drives and pretty much any memory card format you can think of. Its NFC chip means you can connect gadgets with a tap, and the 2.7-inch touchscreen display



BUY  
\$100

allows you to access Facebook, Flickr, Evernote and several other services directly from the printer. With duplex printing, a four-cartridge

setup and a max DPI of 6,000, it offers plenty of bang for your buck.

**KEY SPECS:** 6,000 DPI max resolution, Ethernet, WiFi Direct, access to web content.

### YOU MIGHT ALSO LIKE...

#### BROTHER MFC-J475DW

Like a younger, well, brother to the MFC-J875DW, the J475DW drops a few of the fancier features, but also \$50 off the asking price. It's got a smaller LCD display, but maintains the "Web Connect" feature for printing straight from various internet services. Duplex printing and a max speed of 27 color pages per minute mean you can get those assignments in when you're perilously close to the deadline.



BUY  
\$50

#### HP PHOTOSMART 6520

HP's Photosmart 6520 is quite the looker. It's feature-rich, too, with all the wireless capabilities you'd expect and a memory card slot for getting your shots straight from camera to page. A sizable 3.45-inch touchscreen accents the front of the unit, and can be used to print directly from online services. Auto-duplex printing is supported, but take note of the 4,800 max DPI before you drop over a hundred bones on one.



BUY  
\$124



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BACK TO SCHOOL GUIDE

# Printers

MONEY'S NO OBJECT



BUY  
\$390

## HP OFFICEJET PRO 276DW

This is for the ~~dorm room~~ penthouse of students with trust funds that aren't going to spend themselves. This Officejet Pro printer only has a max color DPI of 1,200, but it will roll out black-and-white or color pages at speeds of up to 25 pages per minute. It boasts auto-duplex printing, copy / scan / fax functions and as many wireless options as you'd dare to try. It'll even serve as a WiFi access point, and has Ethernet, modem and USB ports. An SD card slot is on board, too, and a 4.3-inch touchscreen serves as your window to deeper features.

**KEY SPECS:** 1,200 DPI max resolution, auto-duplex printing, up to 25 ppm, fax-capable, WiFi access point, 4.3-inch touchscreen.

### YOU MIGHT ALSO LIKE...

#### BROTHER MFC-J6910DW

Capable of printing on paper sizes up to 11 x 17 inches, this Brother all-in-one hooks up with networks via Ethernet or WiFi. It'll take orders from mobile devices, and prints color at a max 6,000 DPI at 27 color pages per minute. It sports a 3.3-inch touchscreen LCD on the outside and, on the inside, there's space for four ink cartridges and 500 sheets of paper. The 35-page auto-document feeder means you can sit back and relax while it copies lecture notes.

BUY  
\$250



#### EPSON ARTISAN 1430

A specialist printer for artsy types, the Artisan 1430 doesn't have any scanning or copying capabilities. It will, however, cough up borderless prints at sizes up to 13 x 19 inches at 5,760 DPI using six individual cartridges. Thanks to WiFi support, you can print any good shots straight from your smartphone with Epson's apps. Bonus: the printer comes bundled with a copy of Adobe's Photoshop Elements.

BUY  
\$300





# SMART- PHONES



Apart from the laptop that churns out your term papers, there's no more essential device than your smartphone. From keeping track of your class schedule on the go to helping you make after-hours plans, a handset is your go-to mobile gadget, so you'll definitely want a good one. Luckily, you have plenty of great options across budget categories, operating systems and screen sizes. We can't promise that your next smartphone will help you make the dean's list, but it might make you the envy of everyone on it.

**By Zachary Lutz**



# Smartphones

ON THE CHEAP



## HTC 8X

The HTC 8X ranks among our very favorite Windows Phone 8 handsets on the market today, and its low price makes it quite the steal. The phone sports a premium enclosure that's refreshingly colorful and unique, and we think you'll dig its ability to capture beautiful photos. The HTC 8X delivers responsive performance and excellent battery life, and its display is a pixel-dense delight. Internal storage is a bit limited, however, and you'll find no expansion options, but this is partially offset by deep integration with Microsoft's SkyDrive cloud storage service.

**KEY SPECS:** 1.5GHz dual-core Snapdragon S4 CPU, 4.3-inch 720p (1,280 x 720) S-LCD 2 display, 8MP rear / 2.1MP front cameras, 8GB or 16GB non-expandable storage, Windows Phone 8.

BUY  
\$0.99  
AT&T

### YOU MIGHT ALSO LIKE...



BUY  
\$0.99  
AT&T

## HTC FIRST

The HTC First is a solid mid-range phone that's available for a bargain-bin price. It's known for its unique Facebook Home interface, but you'll also have the option of using a stock Android 4.1 launcher. This reasonably compact smartphone features a quality 720p display and good performance. The camera is somewhat of a letdown, but that's forgivable given the handset's low cost.

## APPLE IPHONE 4

The iPhone 4 features superb construction, an impressive camera and the fantastic Retina display. Overall, you'd be hard-pressed to find a much nicer phone

for the money. That said, the iPhone 4 is showing its age: it lacks LTE connectivity and doesn't support Siri, panorama mode or FaceTime over cellular.



BUY  
\$0.99+  
Verizon

BUY  
\$0.99+  
AT&T





# Smartphones

MID-RANGE



BUY  
\$100  
AT&T

## LG OPTIMUS G PRO

If you're dreaming of a super-sized powerhouse that's available at a surprisingly affordable price, look no further than the LG Optimus G Pro. Its extra-large 1080p display is a sight to behold, featuring crisp, vibrant images and good viewing angles. The Pro also includes a 13-megapixel camera, which captures detailed shots that'll satisfy most users — so long as you're willing to look past the color balance issues. The Optimus G Pro may be too large for some — and its battery life is mediocre — but if you're on a budget and want a phone that can run with the big dogs, it's your best choice.

**KEY SPECS:** 5.5-inch 1080p (1,920 x 1,080) True HD-IPS + LCD display, 1.7GHz quad-core Snapdragon 600, 13MP rear / 2.1MP front cameras, 32GB expandable storage, Android 4.1.

## YOU MIGHT ALSO LIKE...

### SAMSUNG GALAXY S III

The Galaxy S III is no longer cutting-edge, but not everyone needs all of the gee-whiz features of the Galaxy S 4. If you're looking for an affordable smartphone that's widely available and offers a good balance of features and performance, the GS3 is an excellent candidate. With a vibrant 720p display, a good camera and responsive performance, it's better than many smartphones on the market today.



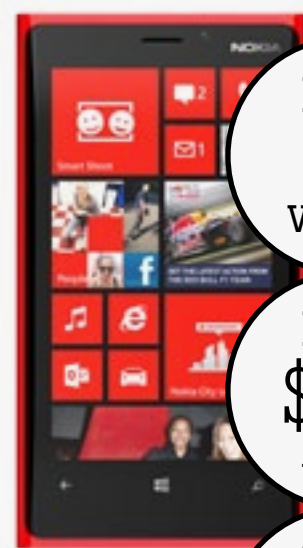
BUY  
\$100  
Verizon

BUY  
\$100  
AT&T

BUY  
\$504  
T-Mobile

### NOKIA LUMIA 920 / 925 / 928

Now that Windows Phone is gaining traction amongst app developers, the Nokia Lumia 920 family is more compelling than ever for those wanting an alternative to Android and iOS. Our favorite of the trio is the Lumia 928, which is more comfortable to hold and offers better battery life. Regardless of carrier, each phone features a camera with optical image stabilization, which results in steadier videos and better nighttime shots.



BUY  
\$0  
Verizon

BUY  
\$100  
AT&T

BUY  
\$480  
T-Mobile



# Smartphones

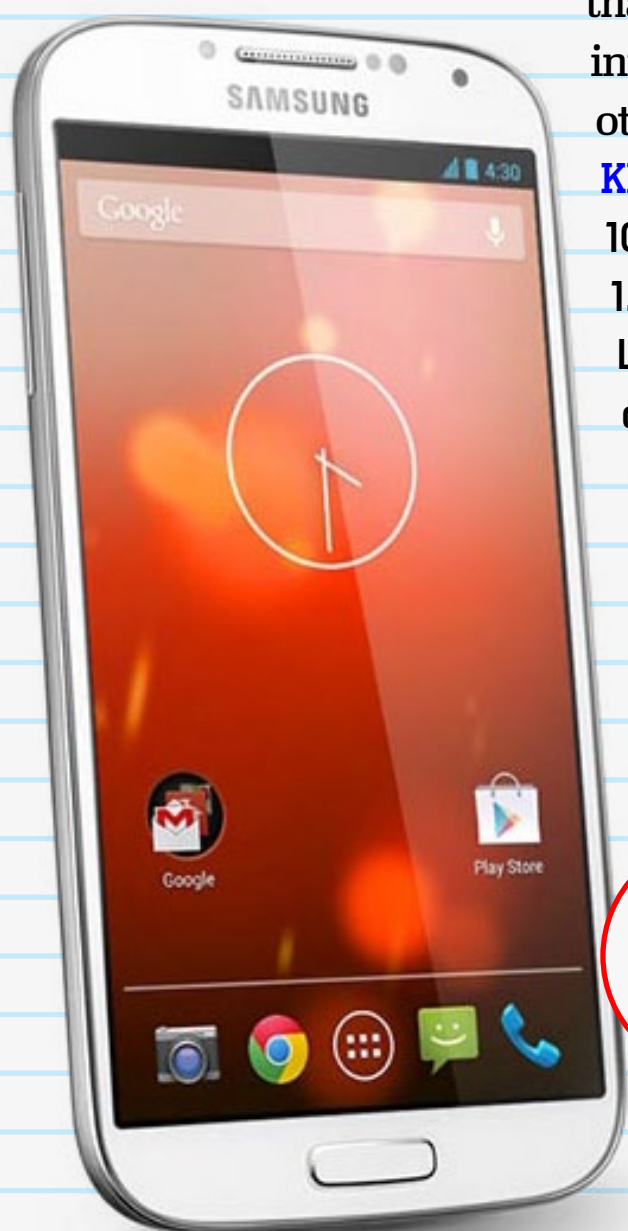
MONEY'S NO OBJECT

## SAMSUNG GALAXY S 4 GOOGLE PLAY EDITION

It doesn't come cheap, but if you want to score the best phone out there for running stock Android, the Galaxy S 4 Google Play edition is where it's at. Compared to the HTC One Google Play edition, the GS4 features superior battery life, Google Wallet and AWS connectivity for T-Mobile's HSPA+ network. As another huge bonus, the phone is unlocked, which means you can use it throughout the world on your carrier of choice. Combine this with the traditional Galaxy S 4 hallmarks such as a great display, expandable storage and a quality camera, and you have a true Android powerhouse

that'll strike envy into the hearts of others.

**KEY SPECS:** 5-inch 1080p (1,920 x 1,080) Super AMOLED display, 1.9GHz quad-core Snapdragon 600, 13MP rear / 2MP front cameras, 16GB expandable storage, Android 4.3.



**BUY  
\$649**

### YOU MIGHT ALSO LIKE...

#### APPLE IPHONE 5

The iPhone 5 is an outright winner if you're looking for a compact smartphone. It boasts snappy performance, a top-notch display, an excellent camera, commendable battery life and gobs of internal storage, along with a beautiful enclosure. The phone is almost due for a refresh, however, which may be reason enough to put off your purchase.



**BUY  
\$200+  
Verizon**

**BUY  
\$200+  
AT&T**

**BUY  
\$650+  
T-Mobile**

#### HTC ONE

The HTC One fuses exemplary design with chart-topping performance. It also sports the finest mobile display we've ever seen and a versatile camera that excels in low-light situations. You'll also appreciate the One's Zoe camera functionality, which weaves still pictures and short clips into 30-second creations that bring life to your photos.



**BUY  
\$200  
AT&T**

**BUY  
\$200  
Sprint**

**BUY  
\$552  
T-Mobile**





# TABLETS

Like reality show contestants who reinvent themselves as America's next top chef / model / crab fisher, tablets are entering a renaissance. In fact, while you probably couldn't complete your high school essays on an iPad or Nexus 7, a slew of optional keyboards are turning slates into capable productivity devices. And as they increase in processing power, tablets are ever thinner and lighter, making it a breeze to schlep 'em around campus in your book bag. So, where to start? How about below, where we've selected nine devices that'll keep you busy before, during and after class.

**By Daniel Cooper**



# Tablets

## ON THE CHEAP

### GOOGLE NEXUS 7

Google finally let the cat out of the bag, introducing the new Nexus 7 this summer. This time around, it gets a higher-resolution display, snappier internals and 2GB of RAM. Packing a rear-facing camera, wireless charging and Google's premium Android experience, it's still staggeringly cheap, with a \$230 base-model price.

**KEY SPECS:** 7-inch (1,920 x 1,200) display, 1.5GHz Qualcomm Snapdragon S4 Pro CPU, Android 4.3 (Jelly Bean), 16GB or 32GB of internal storage, optional 4G LTE.

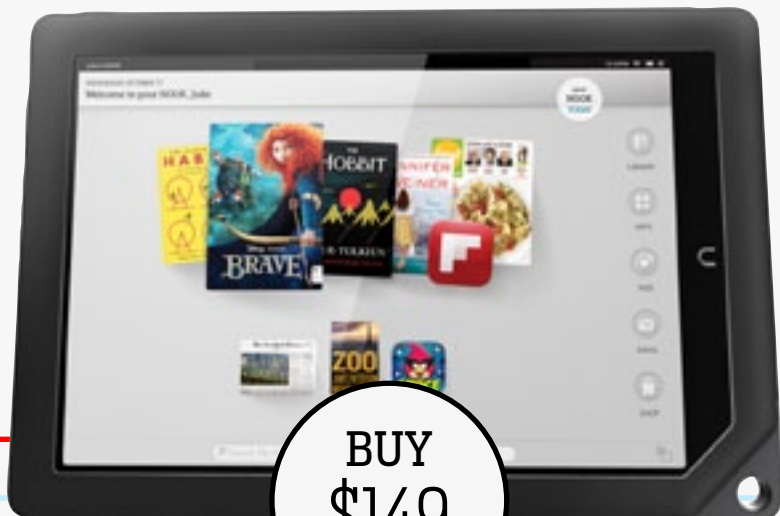
BUY  
\$230



### YOU MIGHT ALSO LIKE...

#### BARNES & NOBLE NOOK HD+

One of the upsides of Barnes & Noble's hesitancy to commit to future tablet development is that the current range of Nook HD tablets is available at a rock-bottom price. Packing a 1,920 x 1,280 display with 32GB storage, the HD+ makes a solid companion for reading and browsing alike.



BUY  
\$149

#### HP SLATE 7

True, we weren't exactly thrilled by HP's Slate 7, due to its low-res display, touch-and-go performance and a comparatively weak battery life. Still, if you're on the hunt for a dirt-cheap slate, you won't find too many others that'll set you back just \$140.



BUY  
\$140





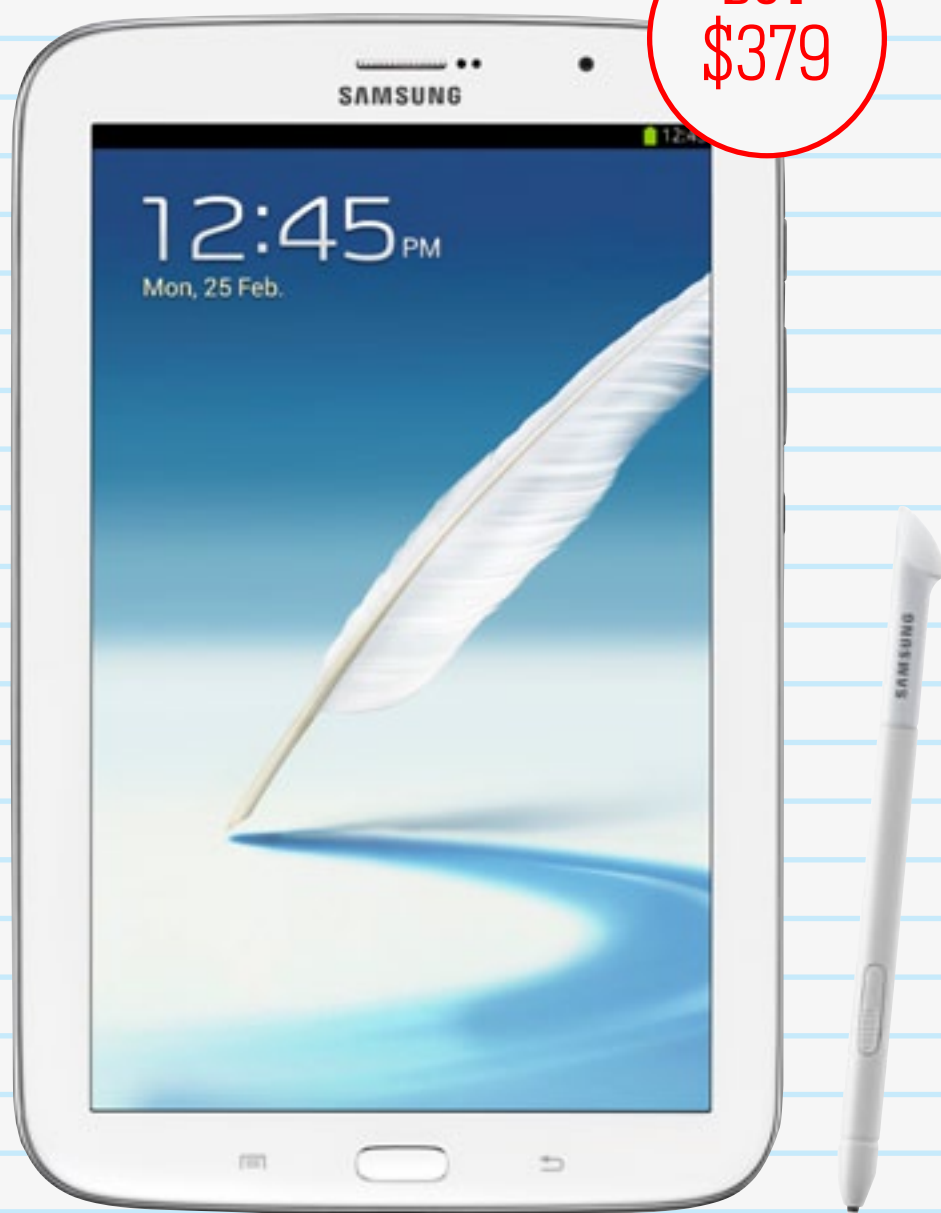
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BACK TO SCHOOL GUIDE

# Tablets

MID-RANGE



## SAMSUNG GALAXY NOTE 8.0

Samsung's prolific tablet business means that it's produced some dodgy pieces of hardware, but from those mistakes come the company's successes, and this time it's created a device that really sizzles.

The Galaxy Note 8.0 combines a rich, pixel-dense screen, a suite of stylus-friendly apps and flagship-level processing power. While it's a highly priced piece of gear, it's also the culmination of the entire Galaxy and Note range of tablets — and that's some pedigree.

**KEY SPECS:** Stylus, 1,280 x 800 display, world-wide version has HSPA+.

### YOU MIGHT ALSO LIKE...



BUY  
\$329

#### IPAD MINI

Apple's "little iPad that could" is easier to hold in the hand, and yet still offers the same great functionality as its bigger brother. With its perpetually growing app selection, excellent build quality and strong battery life, you get all of the standard iPad goodness with a little less heft.

#### KINDLE FIRE HD 8.9 + LTE

If all you want to do is consume content, then an electronic window onto Amazon's digital storefront isn't a bad place to start. This Sears catalog of the modern era comes with a beautiful 1080p display, cheap data and LTE for casual browsing. On the downside, unless you're prepared to do some hacking, you'll be left without access to Google Play.



BUY  
\$399



# Tablets

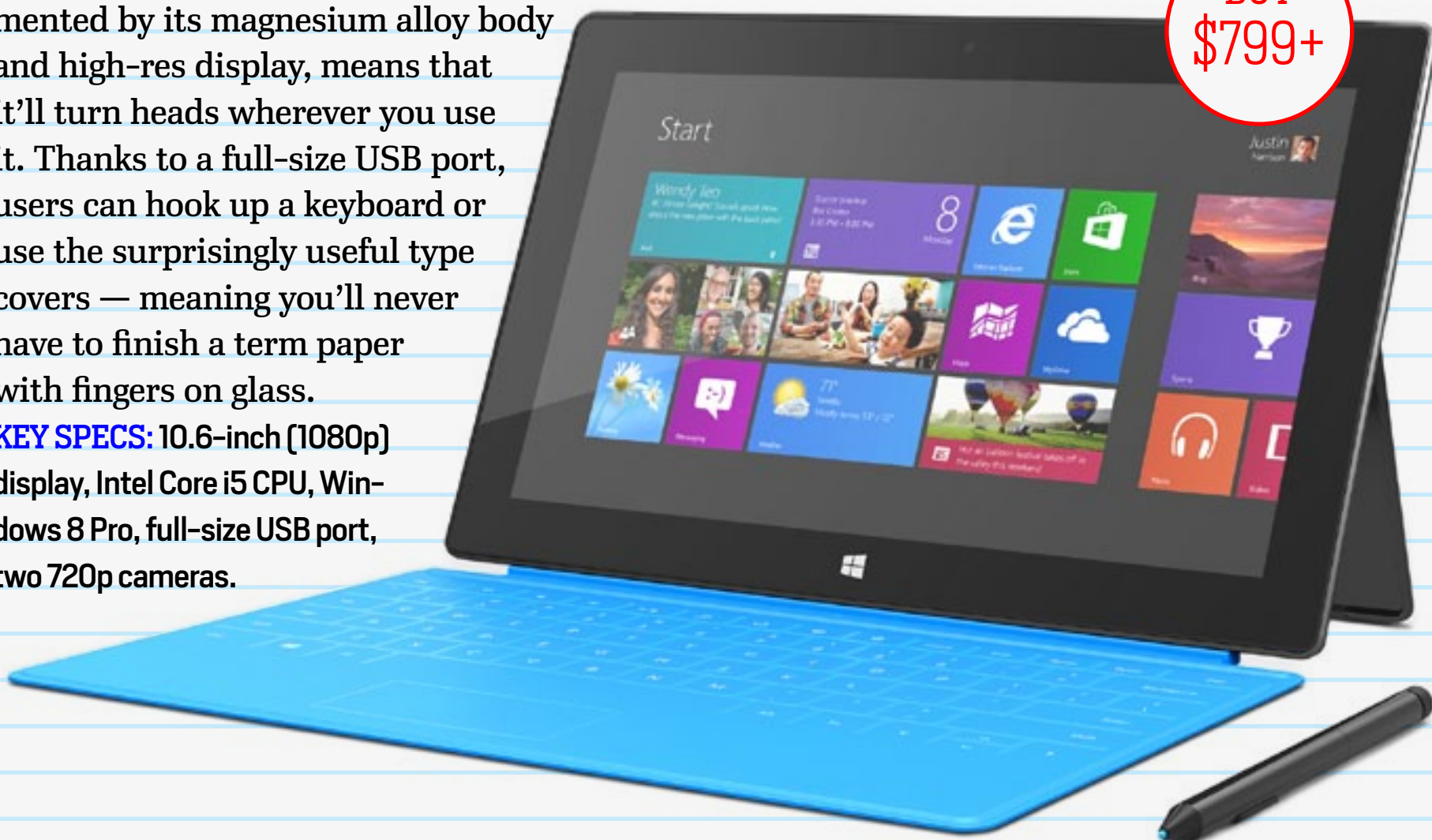
MONEY'S NO OBJECT

## MICROSOFT SURFACE PRO

Microsoft reinvented its OS with a focus on touch and tablets, making the Surface Pro the ultimate Windows 8 machine. Its brutal design, complemented by its magnesium alloy body and high-res display, means that it'll turn heads wherever you use it. Thanks to a full-size USB port, users can hook up a keyboard or use the surprisingly useful type covers — meaning you'll never have to finish a term paper with fingers on glass.

**KEY SPECS:** 10.6-inch (1080p) display, Intel Core i5 CPU, Windows 8 Pro, full-size USB port, two 720p cameras.

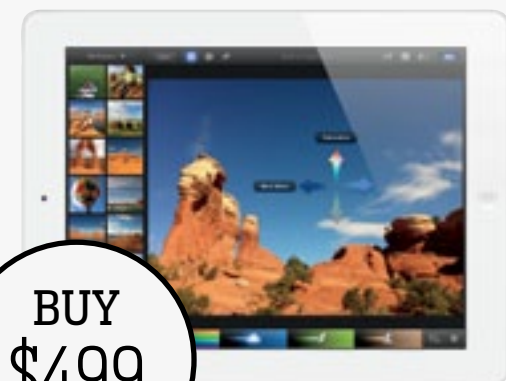
BUY  
\$799+



### YOU MIGHT ALSO LIKE...

#### APPLE IPAD

While we're hoping that Apple will unveil a dazzling fifth-gen iPad any moment now, the current version is still a near-essential purchase. Combine iOS' unparalleled selection of education apps and textbook partnerships, its killer internals and beautiful body and, frankly, it's a no-brainer.



BUY  
\$499

#### XPERIA TABLET Z

If you're looking for a TV companion that'll also withstand a spilled cup of coffee, then Sony's Xperia Tablet Z is probably the device for you. With its stark looks, nearly nine hours of battery life and waterproofing, it's Sony's best slate yet.

BUY  
\$499





# ULTRA- PORTABLES



Ultrabooks hit the mainstream in 2012; in 2013, they're claiming the high end. Intel's Haswell-based processors are giving thin laptops the extreme resolutions, all-day battery life and touchscreens we wish we'd had in full-size portables a year ago. They might just be the perfect fit for students who want high-end features without the typical high-end bulk. Accordingly, our 2013 back to school guide rounds up the more advanced Ultrabooks alongside more affordable, extra-thin PCs. No matter your budget, these ultraportables are bound to lighten your backpack.

**By Jon Fingas**



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BACK TO SCHOOL GUIDE

# Ultraportables

ON THE CHEAP

## YOU MIGHT ALSO LIKE...

### ACER ASPIRE V5 (11.6-INCH)

Choosing a budget ultraportable doesn't mean you have to sacrifice all the cool extras. Case in point: Acer's 2013-era



BUY  
\$400

Aspire V5. The 11.6-inch system combines a touch-screen with a Kabini-based AMD A4 chip that promises both good battery life and graphics quick enough for some light gaming.

### ASUS VIVOBBOOK X202E

Think of the VivoBook X202E (aka the Q200) as the Aspire V5's long-lost cousin. It has a similar 11.6-inch touch display, but it's using an Intel Core i3 that trades the pure efficiency of the V5's A4 chip for some extra performance. A Haswell processor would make it more compelling, but it's still a real bargain for students who want a finger-friendly ultraportable.

BUY  
\$470



BUY  
\$750

## LENOVO IDEAPAD YOGA 11S

Our only major beef with Lenovo's IdeaPad Yoga 11 was its lack of legacy support. Consider that fixed: the Yoga 11S has the clever convertible tablet design and high build quality of its ARM-based sibling, but with the backward compatibility that Windows veterans crave. We'd hold out for a version with Haswell inside if possible, but even the Ivy Bridge-based Yoga 11S is worth a look. At \$750, it's a good deal for students who want both a traditional PC for classwork and a tablet for Netflix-viewing in the after-hours.

**KEY SPECS:** 11.6-inch display with 1,366 x 768 resolution, 1.4GHz Core i3 to 1.5GHz Core i7, 128GB to 512GB SSDs, 0.67 inch thick, 3.08 pounds.





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BACK TO SCHOOL GUIDE

# Ultrabooks

MID-RANGE



## APPLE MACBOOK AIR

BUY  
\$1,000+

Haswell may have improved the battery life of many Ultrabooks, but there's no doubt about it: Apple's 2013 MacBook Air is a longevity leader. The 13-inch model can last for about 12 hours; even its 11-inch sibling should

run for nine hours. When you combine this with an excellent keyboard and trackpad, you're getting a system that will easily handle a long day of lectures. We wish that Apple had upgraded the MacBook Airs' displays, but

it's still one of the strongest Ultrabooks on the market.

**KEY SPECS:** 1,366 x 768 / 1,440 x 900 resolution (11-inch / 13-inch), 0.68 inch thick, 1.3GHz Core i5 or 1.7GHz Core i7, 128GB to 512GB SSDs, 2.38 / 2.96 pounds.

### YOU MIGHT ALSO LIKE...

#### SONY VAIO PRO 11

If you've ever winced from the pain of an overloaded book bag, Sony's VAIO Pro 11 is your dream machine. At 1.92 pounds, it's one of the lightest Ultrabooks ever — and this is with a 1080p touchscreen. The Pro 11 won't match the MacBook Air in terms of battery life or input, but the faster processor and extra weight savings may tip the balance for students with moderate budgets.

BUY  
\$1,150



#### SAMSUNG ATIV BOOK 7

No, Samsung's ATIV Book 7 isn't toting Haswell just yet, but it's still worth your attention as is. This 13.3-inch Ultrabook is simply well-rounded — a 1080p touchscreen, an excellent trackpad, strong performance and a pleasing look make it a solid choice. Just be aware that you'll have to look elsewhere if you need more than a Core i5 or a 128GB SSD, since there are no upgrades to this model.

BUY  
\$1,000



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BACK TO SCHOOL GUIDE

# Ultraportables

MONEY'S NO OBJECT

## SAMSUNG ATIV BOOK 9 PLUS

From a pure technology perspective, Samsung's 13.3-inch ATIV Book 9 Plus reigns supreme. That 3,200 x 1,800, fold-flat touchscreen? Your choice of Haswell-based processors? A 12-hour battery? Yes, please. Combine those with Samsung's typically well-made keyboard and trackpad, and you have an Ultrabook that should be the envy of the classroom. There's no question that you'll pay a premium, but all things considered, it could be money well-spent.

**KEY SPECS:** 3,200 x 1,800 resolution, Core i5 and Core i7 processors, 128GB or 256GB SSDs, 3.06 pounds.



BUY  
\$1,400



YOU MIGHT  
ALSO LIKE...

BUY  
\$1,310

## ACER ASPIRE S7

Give credit to Acer for doing its homework; the 2013-era Aspire S7 fixes just about every gripe we had with the original. While it's not as cutting-edge as the ATIV Book 9 Plus, we doubt many will object to the optional 2,560 x 1,440 touchscreen, Haswell processors and seven hours of battery life.

## DELL XPS 12

The original Dell XPS 12 was hampered by its so-so battery life, but now that the 12.5-inch convertible Ultrabook has gone through a Haswell refresh, it's a much more viable PC for those who need an all-day machine. And while the rotating screen might be odd, there's no denying the appeal for students who occasionally crave a tablet... or just want to stand out from the crowd.



BUY  
\$1,200







DISTRO  
08.23.1

VISUALIZA

**HORTUS.  
PARIS**



CREDIT: HORTUS PARIS BY ECOLOGICSTUDIO





The image shows a large-scale art installation titled 'Hortus Paris'. It features numerous transparent, funnel-shaped structures suspended from the ceiling by thin wires. Each funnel contains a green liquid and is connected to a network of white tubes that resemble roots or veins. The installation is set against a dark background with large, white, stylized letters 'H' and 'C' visible. A yellow banner with the text 'HORTUS. PARIS' is overlaid on the image. In the bottom left corner, there is a white double arrow icon. In the bottom right corner, there is a white circle with a cross inside. The overall aesthetic is futuristic and organic.

DISTRO  
08.23.1

## HORTUS. PARIS

VISUALIZ

ecoLogicStudio is exploring innovative ways to integrate novel materials, such as algae, into our daily lives with its latest work entitled *HORTUS.PARIS: The Machinic Harvest*, on display until September at the Alive Exhibition in France. The goal is to experiment with self-sufficiency in urban (and potentially extraterrestrial) spaces by creating a “proto-garden” where visitors can interact with the biomaterial, in part by providing life-giving CO<sup>2</sup> and receiving oxygen as part of its harvest. The project’s data is broadcast via images, statistics and tweets over its four-month growing period, which visitors can monitor on mobile devices. While *HORTUS* (from Latin, hortus conclusus: enclosed garden) flows deeply into artistic concept, it does attempt to communicate with the psyche of today’s society to promote the valuable interactions of science, mankind and the delicate ecological balance.

CREDIT: HORTUS PARIS BY ECOLOGICSTUDIO





The week that was in 140 characters or less

# Data Hoarders, Bling Ringers and Instant Gratification

DISTRO  
08.23.13

ESC

REHASHED

@alexismadrigan

## Is the Internet broken?

@ggreenwald

NSA really is saying: we collect billions of emails/calls every day- what's a few thousand privacy violations? the 1st point is actually key

@mel0

Hmm, a possible gold iPhone coming out huh? That won't get stolen.

@NuAngel

Dear Internet.org - please check zip code 16434 on a broadband map. Let's get broadband HERE before we go beyond.

@zpower

I love imagining that samsung approves a product (like galaxy gear), assigns 85,000 engineers to work on it, and finishes it the next day

THE STRIP

BY BOX BROWN



DISTRO  
08.23.13

ESC

TIME  
MACHINES

WHAT IS THIS?  
TOUCH TO FIND OUT

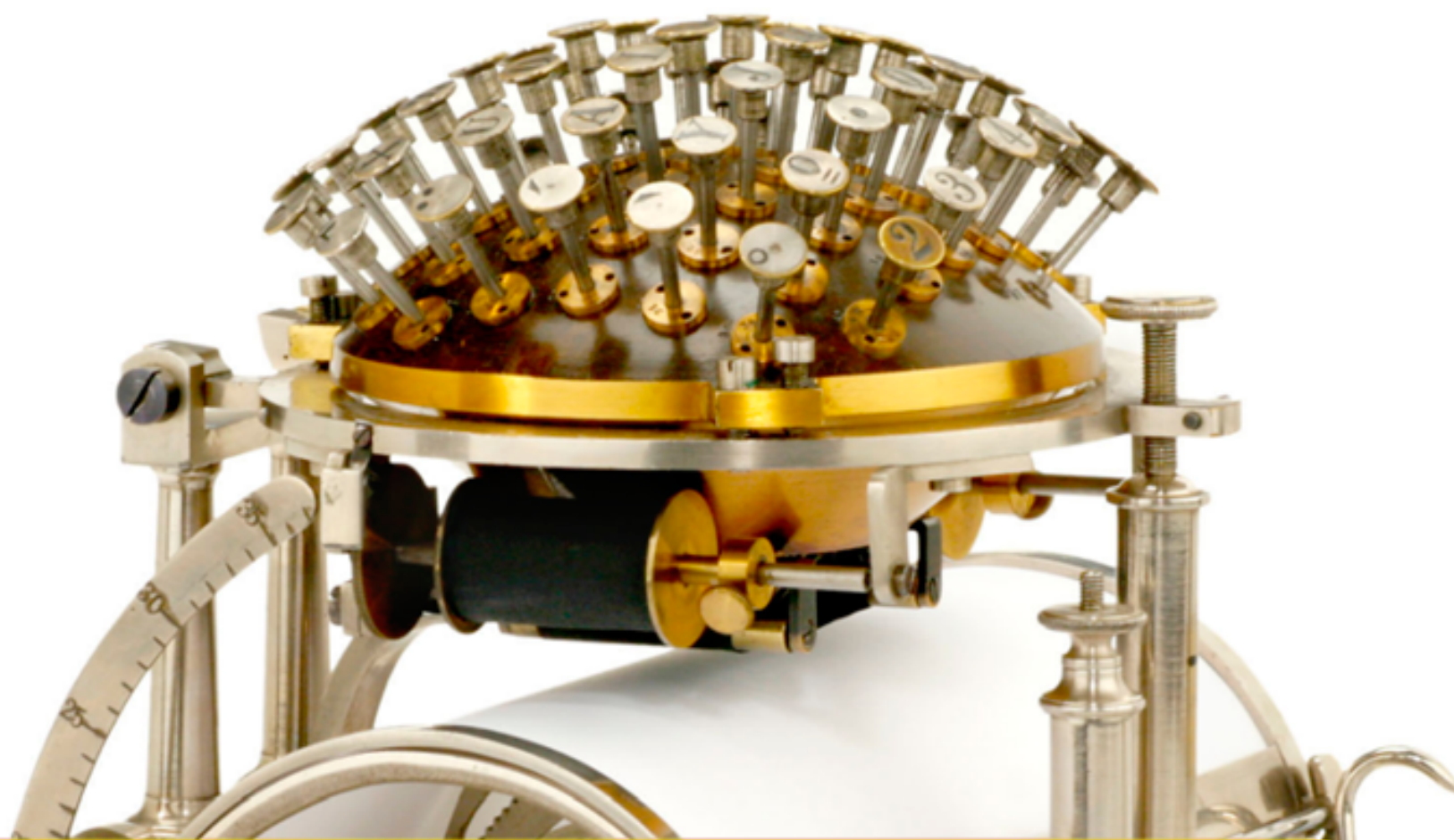


AUCTION TEAM BREKER - COLOGNE, GERMANY





## MALLING-HANSEN WRITING BALL

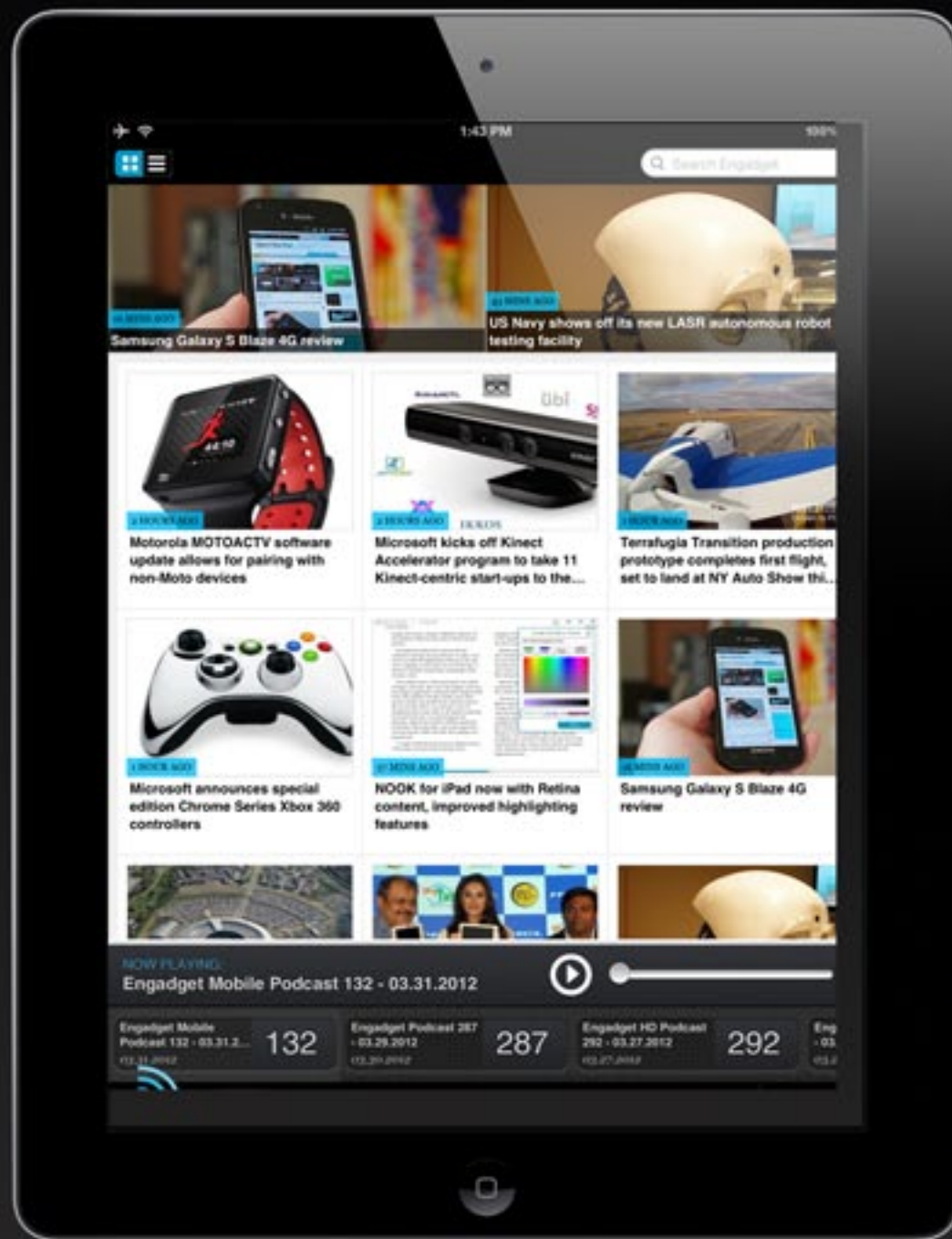


» The keys aren't island style or chiclet; they actually seem more reminiscent of Guy Fieri's hair, if anything. This typewriting device sprang from the mind of Rasmus Malling-Hansen, a Danish inventor and principal of the Royal Institute for the Deaf. The hemispherical Writing Ball was invented in 1865, patented in 1870 and subsequently evolved over two decades and several iterations. This model, circa 1878, used carbon paper or ribbon to record the key strikes onto a paper sheet that was mounted on a semi-cylindrical platen. The mechanism would advance the paper's position letter by letter, requiring a carriage return for each new line. The Writing Ball ("skrivekugle" in Danish) won several awards as it toured exhibitions across Europe and the United States during the late 1800s and is known as one of the first typewriters ever to be sold commercially in significant quantities.



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